

The Pinnacle of Camera Mounting

Modular Towers & Columns 100 Fixed & Tilt Down **Tubular Poles** -**Cabinet Based** Poles ----- (m-----**Ornate Poles** Infrastructure Transport & Brackets & Accessories Technical

CCTV Product Catalogue v4.1

Altron successfully proposed, designed, manufactured and delivered, on time, over 1300 deployable camera poles and cylindrical bases, in the lead up to the 2012 London Olympics.

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Welcome to our comprehensive guide to CCTV camera mounting equipment.

Whilst most applications should be covered in this catalogue, we can supply variations to many of our products and also produce products tailored to suit associated industry needs.

Please feel free to contact us.

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\rightarrow Company Overview



We are dedicated to supplying the most secure products of the highest standard...



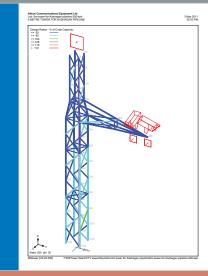
← Facilities

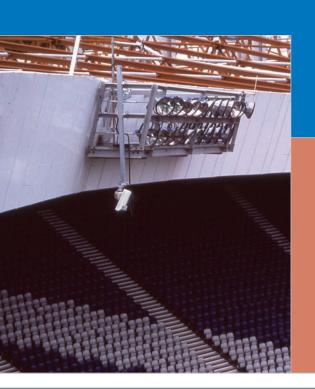
Our UK base provides 6,000m² (60,000ft²) of manufacturing space in a modern well-equipped facility situated close to the main motorway network.

Ongoing investment in equipment means that we remain at the forefront of being able to supply competitively and reliably.

Design

Altron has been responsible for many firsts in the industry and that continues to this day. From the first purpose-built cabinet based pole through to some of the new products included in this edition, with many unique and patentable features.





← Product Range

Our product range is extensive - we have many other solutions in addition to those shown in this catalogue - let us know what, how and where you want to mount and we'll find the answer.



← Supply

We have a large range of stock, enabling us to ship your order in the shortest time possible. This includes most brackets, towers and columns and a selection of our most popular poles.





With our own fleet of delivery vehicles we are able to offer a first class, professional delivery service across the whole of the UK.

We have a great deal of experience in organising shipments to countries across the world and have selected a small number of expert shipping companies to service these markets, with containers shipping weekly.



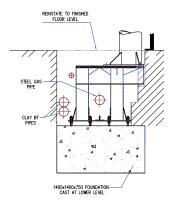
Support

 \leftarrow

Our dedicated knowledgeable people are able to support you in finding the best product for your needs.

There are many technical services available, including advising on site specific foundations and providing specific calculations and information to satisfy your client's needs.

We can train your people to operate our products safely and competently and offer training in winch operation for our tilting, telescopic and lowering trolley head poles.



Buried flange foundation detail

With our history and service you can be sure.... You're Safe with Altron

\rightarrow Worldwide Presence



Altron supplies to markets worldwide, with countries in the Middle East being of particular importance. Here is a small selection of projects to date:-

← AW1545 Tilt Down at central area of highway Kuwait



Monopole located within petrochemical refinery Qatar →





← AW1545UP at Doha Cultural Centre Qatar

ACT Lattice tower located at petrochemical installation Middle East →



AW1859 located roadside Oman ↑



You're Safe with Altron

We are dedicated to supplying the most secure products of the highest standard to ensure your CCTV installations are the best they can be. With our industry leading secure features you're safe with Altron.





Heavy duty latch resists lever attacks and close fitting oval spindle means lock cannot be operated without correct key.





Altron's unique flush door design has 1mm clearance all round, preventing successful lever attacks.



Secure vents

Mesh-covered offset internal aperture and vent orientation with ground level combine to hinder access through vent.



Altron Communications Equipment Ltd

The pinnacle of camera mounting

\rightarrow Index By Part Number

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Modular Towers & Columns ←





ACT2BP

Altron's range of Modular Towers and Columns are a practical and economic solution to many commercial and industrial CCTV installations. Sectional construction means economic shipping and easy installation in more inaccessible locations.

We offer the most comprehensive range available with tilt-down models up to 15 metres and fixed models up to 25 metres with telescopic, cabinet based and internally cabled products completing the range.

Altron's numerous security design features ensure a good level of resistance against vandal attacks.

Modular Towers & Columns

→ ACC Modular Columns





Tilt-down columns have the facility to be padlocked internally

Fixed height range 4.5m - 10m Tilt-down height range 4.5m - 15m

Altron Camera Columns, a cost effective and comprehensive range with most models available 'ex stock', offering a good level of security. Suitable for installations where the public has access - tilt-down models have internal padlock facility. The range is generally for light to medium fixed and PTZ applications, but there are also heavy duty (HD) options for high loading PTZ and dual lighting & CCTV applications.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Schools and universities
- o Railway platforms & car parks
- o Car parks
- o Petrochemical sites
- o Sports stadia

Security Features

- o Internal cabling
- o Internal padlock facility on tilt-down models to protect against unauthorised lowering
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- o Modular construction for ease of assembly and installation on site
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- Demountable winches ensure tilt down models are secure and reduces costs on multiple installations
- o Tilt Down models enable camera maintenance at ground level, therefore reducing maintenance costs
- o Tilt Down models available in both bolt down and post mounted base versions
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Quick turnaround for larger projects
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107

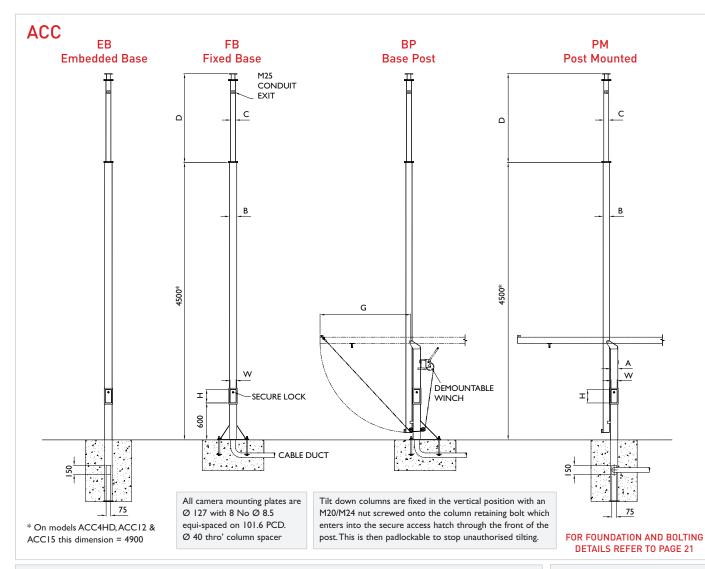


All columns have flush fitting doors



ACC2BPLA in tilted position

ACC Modular Columns ← **Technical Specifications**



Model No.	Height in	Post type	Max equip	Max equip	Post size	Lower section	Mid sectior	Upper section	Extension length	Door aperture	Column Rear	Winch part	Product weight	Accessorie	es
	mtrs		weight at top kgs	surface area m ²	A ²	B ²	B ²	C ²	D mtrs	size HxW	clearance when tilting G	e number	kgs	Top mounting brackets for Fixed and PTZ cameras	
ACCI	4.5	FB/EB	35	0.3	-	100	-	-	-	250x70		-	68	Swanneck brackets for Do	me
Standard		PM	35	0.3	120	100	-	-	-	270x80	1700	DW1000/AC	100	cameras	
Duty		BP	35	0.3	120	100	-	-	-	270x80	1700	DW1000/AC	115		
ACC2	6	FB/EB	25	0.2	-	120	-	90	1.5	270x80	-	-	114	Anti-climb guards	
Standard		PM	25	0.2	120	100	-	80	1.5	270x80	1700	DW1000/AC	115		
Duty		BP	25	0.2	120	100	-	80	1.5	270x80	1700	DW1000/AC	130	Clamp-on camera mountin	ıg
ACC2H	I D 6	FB/EB	35	0.3	-	150	-	100	1.5	280x110	-	-	144	brackets	
Heavy		PM	35	0.3	120	120	-	90	1.5	270x80	1700	DW1000/AC	138	Telemetry box mounting	
Duty		BP	35	0.3	120	120	-	90	1.5	270x80	1700	DW1000/AC	157	brackets	
ACC3	7.5	FB/EB	25	0.2	-	150	-	100	3	280x110	-	-	161	Drackets	
Standard		PM	25	0.2	150	120	-	90	3	280x110	2000	DW1500/AC	189	Column top mounting cage	es
Duty		BP	25	0.2	150	120	-	90	3	280x110	2000	DW1500/AC	193	Column top mounting cugo	
ACC3H	I D 7.5	FB/EB	50	0.3	-	200	-	120	3	315x150	-	-	178		
Heavy		PM	50	0.3	150	150	-	100	3	280x110	2000	DW1500/ACHE	D 218	Quick refere	enc
Duty		BP	50	0.3	150	150	-	100	3	280x110	2000	DW1500/ACHI) 222		
ACC4	9	FB/EB	25	0.16	-	150	-	100	4.4	280x110	-	-	197	Single fixed camera knuckle	e P]
Standard		PM	25	0.16	150	150	-	100	4.4	280x110	2000	DW2500/AC	244		
Duty		BP	25	0.16	150	150	-	100	4.4	280x110	2000	DW2500/AC	248	Twin fixed camera bracket	Т
ACC4H	I D 10	FB/EB	50	0.5	-	200	-	150	4.9	315x150	-	-	305		
Heavy		PM	50	0.5	200	200	-	150	4.9	315x150	2600	DW2500/ACHI	5 492	Half swanneck for dome	A١
Duty		BP	50	0.5	200	200	-	150	4.9	315x150	2600	DW2500/ACHI	5 00		
									i ii					Full swanneck for dome	A١
ACC12	12	PM	35	0.3	200	200	150	100	4.9 4.9	315x150	2600	DW2500/ACHI	5 18		
		BP	35	0.3	200	200	150	100	4.9 4.9	315x150	2600	DW2500/ACHI	5 26	Anti climb guard	SC
ACC15	15	PM	25	0.16	200	200	150	100	4.9 4.9	315x150	2600	DW2500/ACHI	5 55	-	
		BP	25	0.16	200	200	150	100	4.9 4.9	315x150	2600	DW2500/ACHI	5 63	Telemetry bracket	A

Where payloads are greater than those stated above, please contact Altron EB Version is directly embedded

All dimensions in mm unless stated otherwise

O	uick	reference	

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P81

P77

P78

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P83

Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
Telemetry bracket	АТВС



Modular Towers & Columns

AW1697

Height range 4.5m - 15m

A cost effective and comprehensive range with most models available 'ex stock', offering a good level of security. The column base post has a built in cabinet for mounting equipment within the one unit, therefore providing cost savings where a separate cabinet would otherwise need to be used. Suitable for installations where the public has access, these columns have an internal padlock facility. The range is generally for light to medium fixed and PTZ applications, but there are also heavy duty (HD) options for high loading PTZ and dual lighting & CCTV applications.

Typically used for the following types of installation

- Industrial and commercial premises
- Perimeter detection 0
- o Utilities sites

о

0

- Schools and universities 0
- Sports stadia

Car parks

0

0

0

- Close fitting flush doors o
- Solid secure heavy duty door locks 0

o Railway platforms & car parks

Petrochemical sites

Securing compounds

General Features

Security Features

Internal padlock facility

Internal cabling

- Modular construction for ease of assembly and installation on site o
- Ideal for restricted access areas o
- Provides stable mounting platform for all camera types o
- Demountable winches ensure tilt down models are secure and reduces costs on multiple installations o
- Tilt Down models enable camera maintenance at ground level, therefore reducing maintenance costs o
- o Tilt Down models available in both bolt down and embedded base versions
- A wide range of standard Altron Accessories and Brackets available ex stock o
- Quick turnaround for larger projects ο
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability ο
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- For design, manufacturing and finishing standards, see details on page 107 0

AW1697/6



Telescopic

Height range 4m - 8m

Altron's range of telescopic columns offer the facility to maintain camera equipment at low level without the need to 'tilt- down' the column. This has the advantage of enabling maintenance for cameras in restricted area locations where a cherry picker does not have access. The range is for light to medium fixed and PTZ applications.

Typically used for the following types of installation

- Industrial and commercial premises 0
- Roof mounted locations
- Security Features

Railway platforms

0

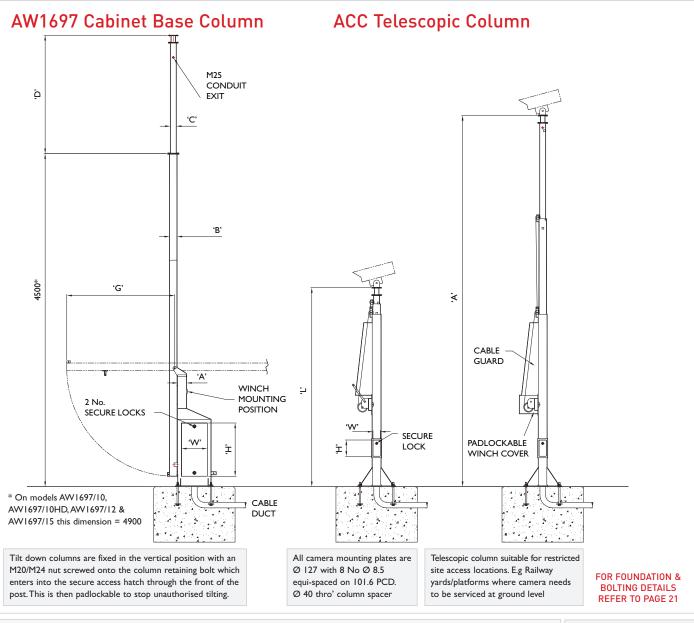
- Internal cabling 0
- Close fitting flush doors 0
- Solid secure heavy duty door locks o
- Padlockable winch cover and cable guard

General Features

- Enables cameras to be mounted in locations that they otherwise could not be. 0
- Ideal for restricted access areas
- Provides stable mounting platform for all camera types ο
- 0 Enables camera maintenance at ground level, therefore reducing maintenance costs.
- A wide range of standard Altron Accessories and Brackets available ex stock o
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability 0
- 0 For design, manufacturing and finishing standards, see details on page 107

- o Railway marshalling areas

AW1697 Cabinet Columns & ACC Telescopic Columns Technical Specification \leftarrow



	Height		Max	Max	Post	Lower	Mid	Upper		Extension		Column re		Product	Accessori	es
No.	in mtrs	type	at top	equip surface area	size A ²	section B ²	section B ²	section C ²	length D I mtrs	length D2 mtrs	aperture size HxW	clearance when tilting G	number	weight kgs	Top mounting brackets Fixed and PTZ cameras	for P76
			kgs	m²											Swanneck brackets for	P81
AW1697/4.5	4.5	BP	35	0.3	120	100	-	-	-	-	600×350	1700	DW1000/97	180	Dome cameras	
AW1697/6	6	BP	25	0.2	120	100	-	80	1.5	-	600×350	1700	DW1000/97	192	Anti-climb guards	P77
AW1697/6H	D 6	BP	35	0.3	120	120	-	90	1.5	-	600×350	1700	DW1000/97	220	Clamp-on camera mour brackets	nting P78
AW1697/7.5	7.5	BP	25	0.2	150	120	-	90	3.0	-	600×350	2000	DW1500/97	244	Telemetry box mountin	g P77
AW1697/7.5H	HD 7.5	BP	50	0.3	150	150	-	100	3.0	-	600×350	2000	DW1500/97H	D 273	brackets	5 177
AW1697/9	9	BP	25	0.16	150	150	-	100	4.5	-	600×350	2000	DW2500/97	299	Column top mounting o	ages P83
AW1697/10	10	BP	50	0.5	200	200	-	150	4.9	3.0	600×350	2600	DW2500/97H	5 51	Out als make m	
AW1697/12	12	BP	35	0.3	200	200	150	100	4.9	3.0	600×350	2600	DW2500/97H	5 577	Quick reference	
AW1697/15	15	BP	25	0.16	200	200	150	100	4.9	4.9	600×350	2600	DW2500/97H	D 614	Single fixed camera P knuckle	rs-I
Telescop	oic Co	olum	ins												Twin fixed camera TI bracket	32-600F

recescopi		otun	1115												bracket
	Full Retracted Height Height A mtrs L mtrs												Half swanneck for dome		
	Am	trs										L mtrs			E II
ACC/TEL/4	4	FB	35	0.25	-	100	80	60	-	-	200×90	2.1	Included	95	Full swanneck for dome
ACC/TEL/6	6	FB	35	0.25	-	120	100	80	-	-	280×110	3	Included	156	Anti climb guard
ACC/TEL/8	8	FB	25	0.11	-	120	100	80	-	-	280×110	3.8	Included	195	Telemetry bracket

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

AW1699H

AW1699F

SGC

ATBC

Modular Towers & Columns

\rightarrow ACT Modular Towers





Fixed height range 4.5m - 12m Tilt-down height range 4.5m - 14m

Altron Camera Towers, a cost effective and comprehensive range with most models available 'ex stock'. Giving good rigidity they are suitable for exposed, high wind load locations. The range is for medium to heavy camera installations, and for dual lighting & CCTV applications, or lighter applications where rigidity is paramount. ACT Towers are not ideally suited to public area installations due to their climbable nature and external camera cabling.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Car parks
- o Petrochemical sites
- o Securing compounds
- o Military and high security sites

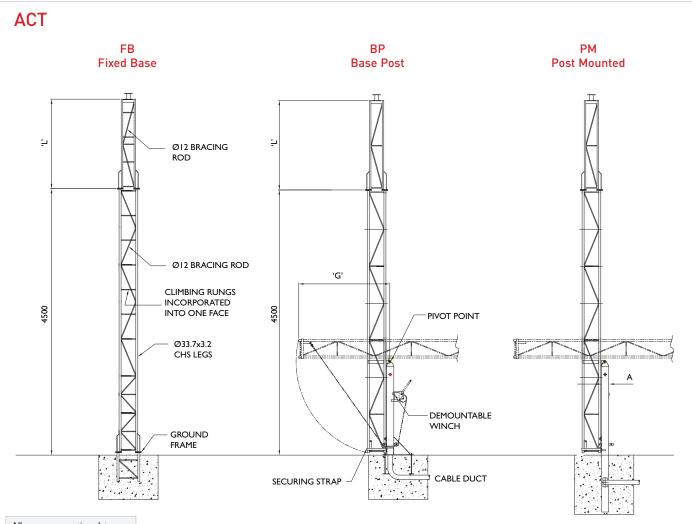
General Features

- o Modular construction for ease of assembly and installation on site
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Demountable winches ensure tilt down models are secure and reduces costs on multiple installations
- o Tilt Down models enable camera maintenance at ground level, therefore reducing maintenance costs
- o Tilt Down models available in both bolt down and post mounted versions
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Simple system of casting ground frame, bolts or post
- o Conduit cabling system available as an option
- o Quick turnaround for larger projects
- o Available with AW1697 Cabinet if required (See page 13)
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107



ACTI BP in tilted position

ACT Modular Towers ← Technical Specifications



All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD.

Ø 40 thro' column spacer

Model No.	Height in mtrs	Post type	Max equip weight at top kgs	Max surface area m ²	Post size A ²	Mid length mtrs L	Top length mtrs	Tower rear clearance when tilting G	part	Product weight kgs
ΑCTΙ	4.5	FB	40	0.4	-	-	-	-	-	55
Standard		PM	40	0.4	120	-	-	1700	DW1000/AT	98
Duty		BP	40	0.4	120	-	-	1700	DW1000/AT	115
ACT2	6	FB	40	0.4	-	-	1.5	-	-	70
Standard		PM	40	0.4	120	-	1.5	1700	DW1000/AT	118
Duty		BP	40	0.4	120	-	1.5	1700	DW1000/AT	135
ACT3	7.5	FB	35	0.25	-	-	3	-	-	81
Standard		PM	35	0.25	120	-	3	1700	DW1500/AT	131
Duty		BP	35	0.25	120	-	3	1700	DW1500/AT	147
ACT3HD	7.5	FB	40	0.35	-	-	3	-	-	107
Heavy		PM	40	0.35	150	-	3	2000	OWI500/ATHD	193
Duty		BP	40	0.35	150	-	3	2000	DWI500/ATHD	197
ACT4HD	9	FB	35	0.25	-	-	4.5	-	-	124
Heavy		PM	35	0.25	150	-	4.5	2000	OWI500/ATHD	204
Duty		BP	35	0.25	150	-	4.5	2000	DWI500/ATHD	208
ACT12	12	FB	25	0.2	-	4.5	3	-	-	150
		BP	25	0.2	180	4.5	3	2400	DW2500/AT	237
		PM	25	0.2	180	4.5	3	2400	DW2500/AT	233
ACT14	14	BP	50	0.25	200	-	7	2800	DW1500/AT14	387
Telescopic		PM	50	0.25	200	-	-	2800	DW1500/AT14	341

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

FOR FOUNDATION & BOLTING DETAILS REFER TO PAGE 21

Accessories	
Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P78
Telemetry box mounting brackets	P77
Tower top mounting cages	P83

Quick reference							
Single fixed camera knuckle	PTS-I						
Twin fixed camera bracket	TB2-600F						
Half swanneck for dome	AW1699H						
Full swanneck for dome	AW1699F						
Anti climb guard	SGT						
Telemetry bracket	АТВТ						

\rightarrow ANCT Modular Towers



Height range 4m - 10m

Altron Nested Camera Towers are designed to be a secure mounting solution, where a lattice tower is the preferred mounting option. Cabling through the tower is completely concealed thanks to its patented hinge design and there is a secure access door and treated backboard within the base post so that connections and equipment are situated inside the tower.

Installation is made easy by the use of a simple bolt frame for setting the holding down bolts and a large entry point into the base post provides clear access for cable ducts. The footprint of the tower is small and the appearance is neat and compact due to the base post 'nesting' inside the tower.

ANCT towers give good rigidity and are suitable for exposed locations. Ideal for medium to heavy camera installations or lighter applications where rigidity is paramount, a full range of accessories are available and all tower components are held in stock. ANCT Towers are not ideally suited for public area installations due to their climbable nature.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Car parks
- o Petrochemical sites
- o Securing compounds
- o Military and high security sites

Security Features

- o Internal cabling
- o Internal padlock facility
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- o Modular construction in 2 metre sections for ease of assembly and installation on site
- o Large integrated cabinet, allowing equipment mounting and internal cable connections
- o Patented method of internal cabling pathway, through cabinet and tilt-mechanism, up through tower leg and exiting via conduit exit points.
- o Simple method of pre-casting base connections only bolts need to be cast, no other steelwork
- o Large cable duct entry into bottom of base post
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Demountable winches ensure towers are secure and reduces costs on multiple installations
- o Enables camera maintenance at ground level, therefore reducing maintenance costs
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107

ANCT6



ANCT winch mounting arrangement

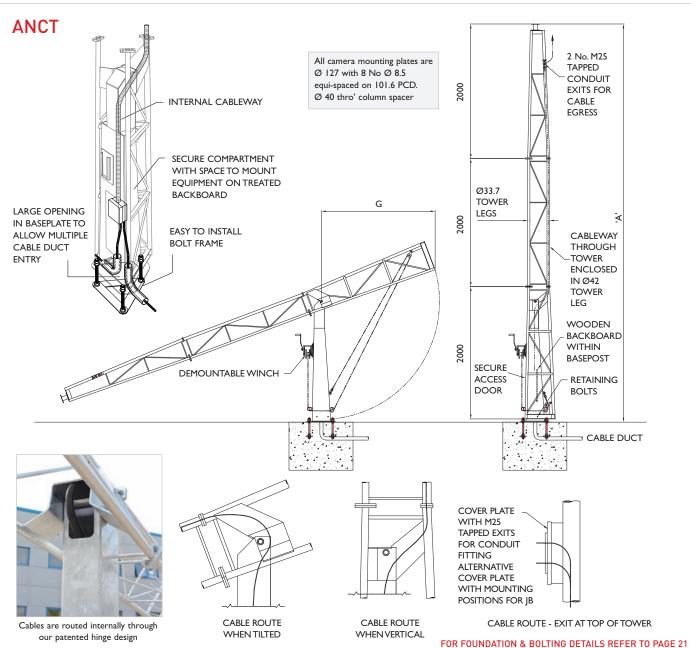


Large equipment mounting backboard



ANCT/6 in tilted position

ANCT Modular Towers ← Technical Specifications



Cable and Conduit Installation Notes

When installing cables within the lower leg, cables should be enclosed within flexible conduit. Where there are too many cables to fit inside a continuous flexible conduit, then a split conduit should be used at the hinge point between the base post and the tower section, locally (see photograph on this page showing flexible conduit in position). Some slack should be left in cables – approx 100mm – to ensure that the cables do not pull tight when the tower tilts down.

Model No.	Height mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Tower rear clearance when tilting G	Cabinet door size H x W	Back board size & compartment depth H x W x D	Winch part number	Product weight kgs
ANCT 4	4	50	0.5	2000	600x165	570x170x150	DW1000/ANCT	145
ANCT 6	6	50	0.4	2000	600×165	570x170x150	DW1000/ANCT	172
ANCT 8	8	30	0.25	2000	600×165	570x170x150	DW2500/ANCT	199
ANCT 10	10	25	0.2	2000	600x165	570x170x150	DW2500/ANCT	226

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

Accessories

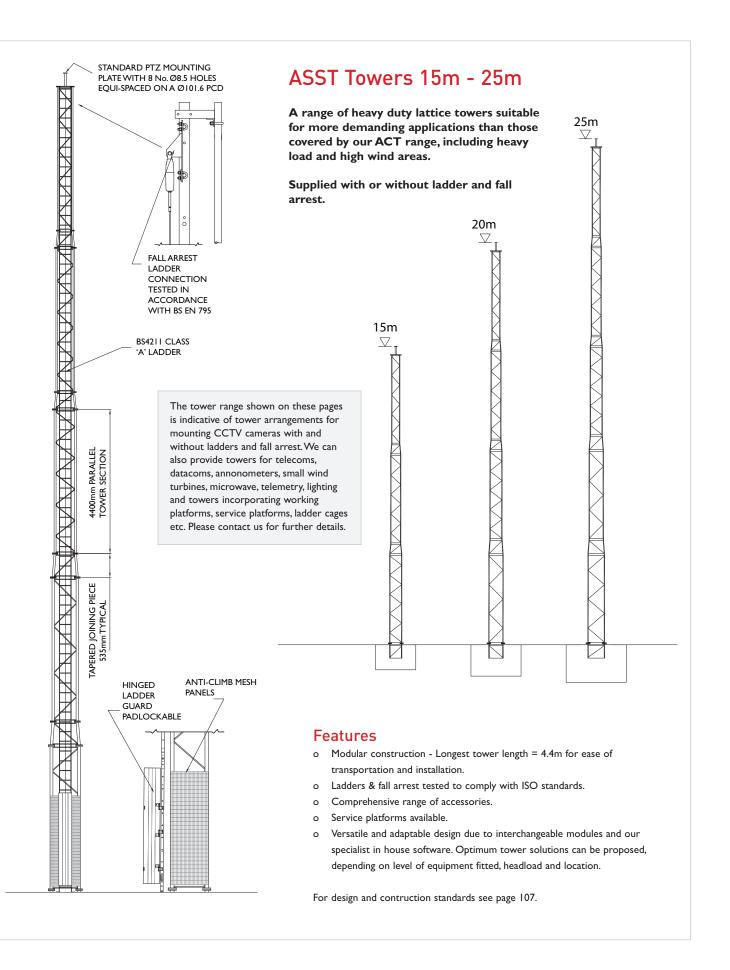
Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P78
Telemetry box mounting brackets	P77
Tower top mounting cages	P83

Quick reference

Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGT3/HD
Telemetry bracket	ATBT

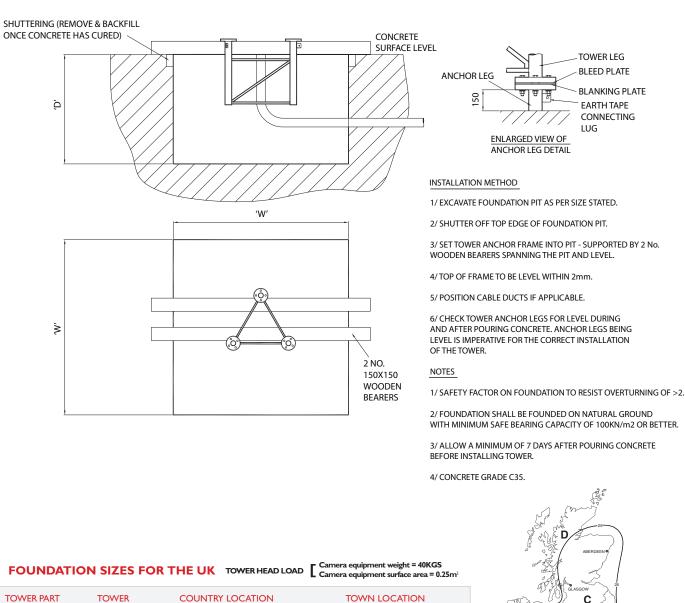
→ ASST Lattice Towers

Modular Towers & Columns



ASST Foundation ← & Installation Methods

ASST



VER PART	TOWER	COL		ION	TO		N
IUMBER	HEIGHT M	AREA	AREA	AREA	AREA	AREA	AREA
OWERS WITH AND FAL	IOUT LADDER L ARREST	A	В	С	A	В	С
ASST/15	15	1.8x1.8x1	2x2x1	2x2x1	1.7x1.7x0.9	1.8x1.8x0.9	1.8x1.8x0.9
ASST/20	20	2x2x1	2.1x2.1x1	2.2x2.2x1.2	1.8x1.8x1	2x2x1	2x2x1.2
ASST/25	25	2.2x2.2x1.2	2.4x2.4x1.2	2.5x2.5x1.2	2x2x1.2	2.2x2.2x1.2	2.4x2.4x1.2
TOWERS WI AND FAL							
ASST/15/HD	15	2x2x1	2x2x1.2	2.1×2.1×1.2	1.8x1.8x1	2x2x1	2x2x1.2
ASST/15/HD ASST/20/HD	15 20	2x2x1 2.3x2.3x1.2	2x2x1.2 2.5x2.5x1.2	2.1x2.1x1.2 2.7x2.7x1.2	1.8x1.8x1 2.2x2.2x1.2	2x2x1 2.3x2.3x1.2	2x2x1.2 2.5x2.5x1.2

FOR FOUNDATION SIZES:- A MINIMUM SOIL BEARING PRESSURE OF 75kN/m² IS ASSUMED

Minimum concrete Grade C35

NUM TOV

т A A A Foundati

Allow 72 hours after pouring concrete before installing pole or tower

Please note that foundation sizes shown in the table above are in accordance with recommended headload andwindload capacities shown in technical specification tables. For increased headloads – foundations may need to increase in size – please contact us for revised foundation sizes for specific installations.

- WIND SPEED AREAS 22m/s, 24/s, 25m/s TAKEN FROM FIG 6 BS6399 BASIC WINDSPEEDS Vb.
- SITE MEAN WINDSPEEDS (Vs) FOR AREAS A, B & C ARE:-A= 24.2m/s(100m ASL) B=26.4m/s(100m ASL) C=28.8m/s(150m ASL)

В

- ACTUAL WIND VELOCITY FOR THESE WINDSPEEDS (Ve) ARE:-A=41.8m/s(93m) B=45.6m/s(102m) C=50m/s(111m ASL)
- FOR AREA 'D' PLEASE CONTACT ALTRON FOR FOUNDATION SPECIFICATION

Modular Towers & Columns

→ Modular Towers & Columns Foundation & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES '1 ^{2,}	BASE PLATE SIZE 'H ^{2,}	SERVICE ENTRY SIZE	SERVICE C ENTRY OFFSET (BP MODELS)	HOLDING DOWN BOLT SIZE D × L	FOUNDA	TION SIZE		UK		
	ĔΕ	<u>Š</u> É	BA	A R	Σ. Σ	EI₹	СО	UNTRY LOCAT	ION	тс		J
	-	Ū	PLA	SE	(BP EN I	ΞÖΞ	AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
CC-FB - Fixe			imns									
CCI/FB	4.5	350	405	90x90		M16x245	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 09 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
CC2/FB	6	450	510	0x 0		M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	$1.0 \times 1.0 \times 0.5$	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
CC2/FB/HD	6	450	510	140x140		M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
CC3/FB	7.5	450	510	140x140		M20x325	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
CC3/FB/HD	7.5	550	630	180×180		M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7
CC4/FB	9	550	630	140x140		M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
CC4/FB/HD	10	550	630	180×180		M24x425	1.8 × 1.8 × 0.9	1.8 × 1.8 × 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 × 1.8 × 0.9	1.8 × 1.8 × 0.9
CC-BP(PM)												
CCI/BP	4.5	450	510	0x 0	90	M20x325	1.0 x 1.0 x 0.5	1.1 × 1.1 × 0.55	1.1 × 1.1 × 0.55	0.9 × 09 × 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
CC2/BP	6	450	510	0x 0	90	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 × 1.1 × 0.55
CC2/BP/HD	6	450	510	0x 0	90	M20x325	1.2 × 1.2 × 0.6	1.2 × 1.2 × 0.6	1.3 x 1.3 x 0.65	1.1 × 1.1 × 0.55	1.2 × 1.2 × 0.6	1.2 × 1.2 × 0.6
CC3BP	7.5	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.3 × 1.3 × 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 × 1.3 × 0.65	1.3 x 1.3 x 0.65
CC3BP/HD	7.5	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.4 × 1.4 × 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 × 1.3 × 0.65	1.4 x 1.4 x 0.7
CC4/BP	9	550	630	140x140	105	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
CC4/BP/HD	10	700	800	180x180	150	M27x600	1.8 x 1.8 x 0.9	1.8 × 1.8 × 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9
CC12/BP	12	700	800	180x180	150	M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 0.9
CC15/BP	15	700	800	180×180	150	M27x600	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.2 x 2.2 x 1.1	1.8 × 1.8 × 0.9	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0
CT-BP-PM-I		andard	d tower	'S (HD bolts	not used on	FB towers)						
CTI	4.5	450	510	110x110	90	M20x325	1.1 x 1.1 x 0.55	l.l x l.l x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	l.l x l.l x 0.55
CT2	6	450	510	110x110	90	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	I.I x I.I x 0.55	1.2 x 1.2 x 0.6
СТЗ	7.5	450	510	110x110	90	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	l.l x l.l x 0.55	l.l x l.l x 0.55	1.2 x 1.2 x 0.6
CT3/HD	7.5	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
CT4/HD	9	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
CT12	12	550	630	160x160	105	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	I.4 x I.4 x 0.7
CT14/BP/PM	14	700	800	230x230	150	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.4 x 1.4 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8
NCT - Neste	d tow	ers										
NCT/4	4	420	570	370x250		M24x425	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	I.I x I.I x 0.55
NCT/6	6	420	570	370x250		M24x425	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	$1.2 \times 1.2 \times 0.6$
NCT/8	8	420	570	370x250		M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
NCT/10	10	420	570	370x250		M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.2 × 1.2 × 0.6	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7
W1697 - cab	inet b	ased t	ilt-dov	n columr	าร							
W1697/4.5	4.5m	450	510	430x280		M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	l.l x l.l x 0.55	0.9 x 09 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
W1697/6	6m	450	510	430x280		M20x325	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$	$1.2 \times 1.2 \times 0.6$	$1.0 \times 1.0 \times 0.5$	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
W1697/6HD		450	510	430x280		M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 × 1.2 × 0.65	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$	$1.2 \times 1.2 \times 0.6$
W1697/7.5	7.5m	550	630	430x280		M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	$1.2 \times 1.2 \times 0.6$	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.65
W1697/7.5HD		550	630	430x280		M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7
W1697/9	9m	550	630	430x280		M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	$1.4 \times 1.4 \times 0.7$
W1697/9HD	10m	700	800	430x280		M27x600	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	2.0 × 2.0 × 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9
W1697/12	12m	700	800	430x280		M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 × 2.0 × 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 0.9
W1697/15	15m	700	800	430x280		M27x600	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.2 × 2.2 × 1.1	1.8 x 1.8 x 0.9	$2.0 \times 2.0 \times 1.0$	$2.0 \times 2.0 \times 1.0$
CC - Telesco	pic co	lumns	5									
CC/TEL/4	4m	350	405	90x90		M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
CC/TEL/6	6m	450	510	110x110		M20x325	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$	$1.2 \times 1.2 \times 0.6$	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$
												1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65
ACC/TEL/8	8m	450	510	110x110		M20x325	1.2 x 1.2 x 0.6	1.2 × 1.2 × 0.65	1.2 × 1.2 × 0.0 1.3 × 1.3 × 0.65	1.1 × 1.1 × 0.55	$1.2 \times 1.2 \times 0.6$	

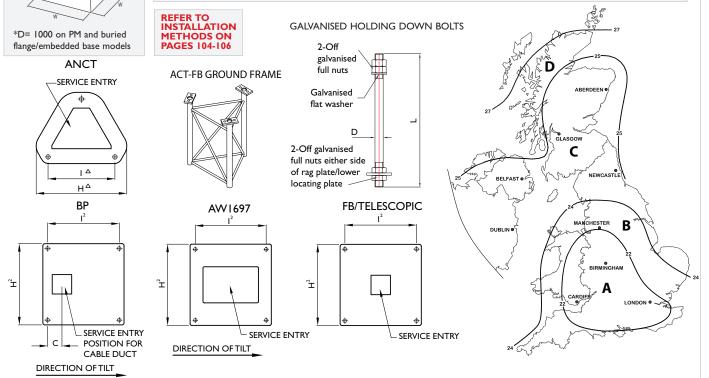
Foundation sizes in table are W x W x D Dimensions in metres

• For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.

• A minimum soil bearing capacity of 75 kN/m² is assumed.

• Foundation base dimensions are typical and may vary depending on site conditions.

• Please refer to the foundations & windloading section on pages 101-103 for further guidance.



Tubular Poles Fixed & Tilt Down ←



Fixed Tubular Poles

AW1502 Lamp Standard Poles

AW1859 - Tilt-Down Poles

Altron's tubular poles provide a comprehensive and versatile range of mounting solutions, suitable for public area locations.

The range comprises of fixed tubular poles, used typically for general CCTV applications; lamp standard poles that fit in with existing street furniture, but are heavy duty, designed specifically for CCTV camera mounting and can also be used for dual lighting and CCTV applications; tilt down tubular poles suitable for public areas, providing the facility to service camera equipment at ground level and tapered tubular poles, that offer an aesthetic appearance to fit in with architectural themes.

Altron's numerous security design features ensure a good level of protection against vandal attacks.

Height range 3m - 12m

A comprehensive range of high specification poles, that cater for light, medium and heavy duty CCTV applications, therefore offering cost effective mounting solutions tailored to the individual installations requirements. A full range of accessories are available to ensure appropriate and high quality installations.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Schools and universities
- o Railway platforms & car parks
- o Car parks
- o Public area CCTV
- o Retail Parks

Tubular Poles Fixed

& Tilt Down

o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- Available in 3 duties; light, medium and heavy duty to accommodate all types of camera installations
 Compartments have doors that are close fitting and flush with heavy duty secure locks and are
- complete with treated backboard
- o Available in bolt down and embedded/direct burial versions
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



AW1581/6

AW1592/6 in stainless steel

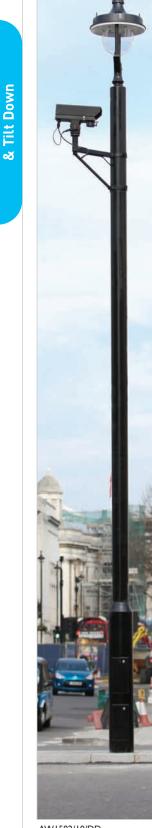
Tubular Fixed Poles ← Technical Specification

							1		
	Tul	bular Pole	25		AW2207	Tapered F	Poles	Options	PT No.
								Access cover plate and	/AC
	Π		Π		t		ØВ	cable restraining bar	
		400	2			99 C	00	Decorative banding	/B
Γ	۲h (·			<u> </u>		High security locks	/HS
	٥		M25					Screw in swan neck adaptor Tamper switch	/SIN /TS
				IDUIT		125		Double Door	/DD
			EXIT					Lighting spigot	/UU /LS
		A H 000	- ØB	CK	250 A A		, SECURE LOCK	All camera mountin are Ø 127 with 8 N equi-spaced on 101 Ø 40 thro' column Poles complete with equipment mountin inside compartment lugs within pole and	lo Ø 8.5 .6 PCD. spacer h treated g board t. Earthing
				DUCT				FOR FOUNDAT BOLTING DETA	AILS
EMBEDI Model No.	DED BASE	Max equip weigh at pole top	surface area		Door aperture size	Pole weight	2 2 2 2 2 2		AILS
Model No.	Height in mtrs	at pole top kgs		DUCT	Door	Pole weight		BOLTING DETA REFER TO PAG	AILS GE 29
1odel No. TUBULAR	Height in mtrs FIXED PO	at pole top kgs	surface area m ²	DUCT Pole ØB	Door aperture size	Pole weight	Top mounting	BOLTING DETA REFER TO PAG	AILS GE 29
1odel No. TUBULAR Light duty - AWI755/3	Height in mtrs FIXED PO - Typically for 3	at pole top kgs DLES fixed camera and sr 25	surface area m ² nall dome installatior 0.25	DUCT Pole ØB	Door aperture size H x W 312 x 76	Pole weight kgs		BOLTING DETA REFER TO PAG	AILS SE 29
1odel No. TUBULAR Light duty - AWI755/3 AWI755/4	Height in mtrs FIXED PO - Typically for 3 4	at pole top kgs fixed camera and sr 25 25	surface area m ² nall dome installation 0.25 0.25	DUCT Pole ØB 114 114	Door aperture size H x W 312 x 76 312 x 76	Pole weight kgs 52 63	Top mounting cameras	BOLTING DETA REFER TO PAC Accessories	AILS GE 29 P76
1odel No. TUBULAR Light duty - AW1755/3 AW1755/4 AW1592/5	Height in mtrs FIXED PO - Typically for 3 4 5	at pole top kgs Fixed camera and sr 25 25 25 25	surface area m ² nall dome installation 0.25 0.25 0.25	DUCT Pole ØB 114 114 139	Door aperture size H x W 312 x 76 312 x 76 312 x 76	Pole weight kgs 52 63 113	Top mounting cameras	BOLTING DETA REFER TO PAG	AILS SE 29
1odel No. TUBULAR Light duty - AW1755/3 AW1592/5 AW1592/6	Height in mtrs FIXED PO - Typically for 3 4	at pole top kgs fixed camera and sr 25 25	surface area m ² nall dome installation 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139	Door aperture size H x W 312 x 76 312 x 76	Pole weight kgs 52 63 113 131	Top mounting cameras Swanneck bra	BOLTING DETA REFER TO PAC Accessories g brackets for Fixed and PTZ ackets for Dome cameras	P76 P81
10del No. TUBULAR Light duty - AW1755/3 AW1552/4 AW1592/5 AW1507/7 AW1507/8	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 8	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 25 25 25 25	surface area m ² 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 139 168 168	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106	Pole weight kgs 52 63 113 131 176 208	Top mounting cameras	BOLTING DETA REFER TO PAC Accessories g brackets for Fixed and PTZ ackets for Dome cameras	AILS GE 29 P76
10del No. TUBULAR Light duty AW1755/3 AW1592/5 AW1592/6 AW1507/8 AW1507/8 AW1581/9	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 8 9	at pole top kgs fixed camera and sr 25 25 25 25 25 25 25 25 25 25 25 25	surface area m ² nall dome installation 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 193	Door aperture size H x W 312 x 76 312 x 76 312 x 76 312 x 76 362 x 106 362 x 106 362 x 126	Pole weight kgs 52 63 113 131 176 208 265	Top mounting cameras Swanneck bra Anti-climb gu	BOLTING DETA REFER TO PAC Accessories g brackets for Fixed and PTZ ackets for Dome cameras	P76 P81
Model No. TUBULAR Light duty - AW1755/3 AW1592/5 AW1592/5 AW1507/7 AW1507/8 AW1581/9 AW1581/10	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 8 9 10	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 25 25 25 25 25 25	surface area m ² 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 168 193 193	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106	Pole weight kgs 52 63 113 131 176 208	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car	BOLTING DETA REFER TO PAC Accessories g brackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets	P76 P81 P77 P79
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10del No. TUBULAR Light duty AW1755/3 AW1592/5 AW1592/6 AW1507/7 AW1507/8 AW1507/8 AW1581/9 AW1581/10 Medium du AW1592/3	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 8 9 10	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 25 25 25 25 25 25	surface area m ² 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 168 193 193	Door aperture size H x W 312 x 76 312 x 76 312 x 76 312 x 76 362 x 106 362 x 106 362 x 126	Pole weight kgs 52 63 113 131 176 208 265	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box	BOLTING DETA REFER TO PAC Accessories g brackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets c mounting brackets	P76 P81 P77 P79 P77
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Model No. TUBULAR Light duty - AW1755/3 AW1755/4 AW1592/5 AW1592/6 AW1507/7 AW1507/7 AW1507/7 AW1507/7 AW1507/6 AW1592/4 AW1507/6 AW1507/6 AW1507/6 AW1576/9 AW1576/10 Heavy duty AW1507/4 AW1507/4 AW1531/6 AW1536/7 AW1576/7 AW1531/9 AW1631/9 AW1631/9	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 7 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10	at pole top kgs PLES fixed camera and sr 25 25 25 25 25 25 25 25 25 25	surface area m ² nall dome installation 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 168 193 193 139 168 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 106 362 × 126 362 × 126	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 110 165 190 235 264 418 461	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca	Accessories Accessories g brackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets inting cages g ring Quick reference amera knuckle mera bracket	P76 P81 P77 P79 P77 P83 P84 PTS-I TB2-60
Model No. TUBULAR Light duty - AW1755/3 AW155/4 AW1592/5 AW1592/6 AW1507/7 AW1507/7 AW1507/7 AW1581/9 AW1581/7 AW1581/8 AW1576/9 AW1576/10 Heavy duty AW1576/10 Heavy duty AW1576/7 AW1581/7 AW1581/	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 8 9 10 10 11 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 12	at pole top kgs PLES fixed camera and sr 25 25 25 25 25 25 25 25 25 25	surface area m ² 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 168 193 193 139 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 126 362 × 126	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 110 165 190 235 264 418	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca Twin fixed car Half swannec	Accessories Accessories ackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets a mounting brackets bracket b	P76 P81 P77 P79 P77 P83 P84 PTS-1 TB2-60 AW16
Model No. TUBULAR Light duty - AW1755/3 AW1592/5 AW1592/5 AW1592/6 AW1507/7 AW1507/7 AW1507/7 AW1581/9 AW1581/7 AW1581/7 AW1581/8 AW1576/9 AW1576/9 AW1576/10 Heavy duty AW1576/7 AW1631/10 AW1631/12 TUBULAR	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 7 8 9 10 10 10 11 7 7 8 9 10 10 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 10 7 7 8 9 10 7 7 7 8 9 10 7 7 7 8 9 10 7 7 7 8 9 10 7 7 7 8 9 7 7 7 8 9 7 7 7 8 9 7 7 7 8 8 9 9 10 7 7 7 8 8 9 7 10 7 7 8 7 7 8 9 10 7 7 7 8 8 9 9 10 7 7 7 8 8 9 7 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 10 7 7 7 8 8 9 10 7 7 7 7 7 8 8 9 10 7 7 7 7 7 8 8 9 9 10 7 7 7 7 8 8 9 9 10 7 7 7 8 8 9 9 10 7 7 7 7 7 7 8 8 9 9 10 10 7 7 7 7 7 8 8 9 9 10 10 7 7 7 7 7 7 8 8 9 9 10 10 7 7 7 7 7 8 8 9 9 10 10 7 7 8 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	at pole top kgs PLES fixed camera and sr 25 25 25 25 25 25 25 25 25 25	surface area m ² 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 168 193 193 139 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 126 362 ×	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 132 154 215 240 293 376 10 165 190 235 264 418 461 547	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca Twin fixed car	Accessories Accessories ackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets a mounting brackets bracket b	P76 P81 P77 P79 P77 P83 P84 PTS-1 TB2-60 AW16
Model No. TUBULAR Light duty - AW1755/3 AW1755/4 AW1592/5 AW1507/8 AW1581/9 AW1581/10 Medium du AW1592/3 AW1592/4 AW1507/5 AW1507/6 AW1576/10 Heavy duty AW1576/10 Heavy LAR Model	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 7 8 9 10 10 10 11 7 7 8 9 10 10 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 7 7 8 9 10 10 7 7 8 9 10 7 7 7 8 9 10 7 7 7 8 9 10 7 7 7 8 9 10 7 7 7 8 9 7 7 7 8 9 7 7 7 8 9 7 7 7 8 8 9 9 10 7 7 7 8 8 9 7 10 7 7 8 7 7 8 9 10 7 7 7 8 8 9 9 10 7 7 7 8 8 9 7 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 7 7 7 8 8 9 10 10 7 7 7 8 8 9 10 7 7 7 7 7 8 8 9 10 7 7 7 7 7 8 8 9 9 10 7 7 7 7 8 8 9 9 10 7 7 7 8 8 9 9 10 7 7 7 7 7 7 8 8 9 9 10 10 7 7 7 7 7 8 8 9 9 10 10 7 7 7 7 7 7 8 8 9 9 10 10 7 7 7 7 7 8 8 9 9 10 10 7 7 8 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 2	surface area m ² 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 168 193 193 139 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 126 362 ×	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 110 165 190 235 264 418 461	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca Twin fixed car Half swanneck	Accessories Accessories g brackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets c mounting brackets arting cages g ring Quick reference amera knuckle mera bracket k for dome c for dome	P76 P81 P77 P79 P77 P83 P84 PTS-1 TB2-60 AW169 AW169
Model No. TUBULAR Light duty - AW1755/3 AW1755/4 AW1592/5 AW1592/6 AW1507/7 AW1507/7 AW1507/7 AW1507/6 AW1581/10 Medium du AW1592/3 AW1507/6 AW1507/6 AW1531/8 AW1576/9 AW1576/9 AW1576/10 Heavy duty AW1576/7 AW1531/5 AW1531/6 AW1531/9 AW1631/12 TUBULAR Model No. ii	Height in mtrs FIXED PO - Typically for 3 4 5 6 7 7 8 9 10 10 11 7 7 8 9 10 10 11 7 7 8 9 10 10 12 7 7 8 9 10 10 7 7 8 9 10 10 7 7 8 9 10 10 11 7 7 8 9 10 10 11 9 10 10 11 9 10 10 11 9 10 10 11 9 10 10 11 10 10 11 10 10 11 10 10 10 10	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 2	surface area m ² mall dome installation 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	DUCT Pole ØB 114 114 139 139 168 168 168 193 193 139 168 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 106 362 × 126 362 ×	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 132 154 215 240 293 376 110 165 190 235 264 418 461 547 Pole weight kgs	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca Twin fixed car Half swannec	Accessories Accessories g brackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets c mounting brackets arting cages g ring Quick reference amera knuckle mera bracket k for dome c for dome	P76 P81 P77 P79 P77 P83 P84 PTS-1 TB2-60 AW165
Model No. TUBULAR Light duty - AW1755/3 AW1592/6 AW1592/5 AW1592/6 AW1507/7 AW1507/7 AW1507/7 AW1507/7 AW1507/6 AW1581/7 AW1581/5 AW1576/9 AW1576/10 Heavy duty AW1576/10 Heavy duty AW1576/7 AW1576/7 AW1576/7 AW1576/8 AW1576/7 AW1576/8 AW1576/7 AW1576/8 AW1576/7 AW1576/8 AW1631/10 TUBULAR Model No. III	Height in mtrs FIXED PC - Typically for 3 4 5 6 7 8 9 10 10 11 7 7 8 9 10 10 12 7 7 8 9 10 10 7 7 8 9 10 10 7 7 8 9 10 10 12 7 7 8 9 10 12 7 7 8 9 10 12 7 7 8 9 10 12 7 7 8 9 10 12 7 7 8 9 10 12 7 7 7 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 2	surface area m ² nall dome installation 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	DUCT Pole ØB 114 114 139 139 168 168 193 193 139 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 126 362 ×	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 154 215 240 293 376 110 165 190 235 264 418 461 547 Pole weight kgs 93	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca Twin fixed car Half swanneck	Accessories Accessories ackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets c mounting brackets c mounting brackets c mounting cages c ring Quick reference amera knuckle mera bracket k for dome c for dome ard	P76 P81 P77 P79 P77 P83 P84 P84 PTS-1 TB2-60 AW165 SGC
Model No. TUBULAR Light duty - AW1755/3 AW1755/4 AW1592/5 AW1592/6 AW1507/7 AW1507/7 AW1507/7 AW1507/6 AW1581/10 Medium du AW1592/3 AW1507/6 AW1507/6 AW1531/8 AW1576/9 AW1576/9 AW1576/10 Heavy duty AW1576/7 AW1531/5 AW1531/6 AW1531/9 AW1631/12 TUBULAR Model No. ii	Height in mtrs FIXED PO - Typically for 3 4 5 6 7 7 8 9 10 10 11 7 7 8 9 10 10 11 7 7 8 9 10 10 12 7 7 8 9 10 10 7 7 8 9 10 10 7 7 8 9 10 10 11 7 7 8 9 10 10 11 9 10 10 11 9 10 10 11 9 10 10 11 9 10 10 11 10 10 11 10 10 11 10 10 10 10	at pole top kgs pLES fixed camera and sr 25 25 25 25 25 25 25 2	surface area m ² mall dome installation 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	DUCT Pole ØB 114 114 139 139 168 168 168 193 193 139 168 168 168 193 193 219 219 219 219 219 219 219 219	Door aperture size H × W 312 × 76 312 × 76 312 × 76 312 × 76 362 × 106 362 × 106 362 × 126 362 ×	Pole weight kgs 52 63 113 131 176 208 265 290 77 95 132 154 215 240 293 376 110 165 190 235 264 418 461 547 Pole weight kgs	Top mounting cameras Swanneck bra Anti-climb gu Clamp-on car Telemetry box Pole top mou PIR mounting Single fixed ca Twin fixed car Half swanneck Anti climb gu	Accessories Accessories ackets for Fixed and PTZ ackets for Dome cameras ards mera mounting brackets c mounting brackets c mounting brackets c mounting cages c ring Quick reference amera knuckle mera bracket k for dome c for dome ard	P76 P81 P77 P79 P77 P83 P84 P84 PTS-1 TB2-60 AW169 AW169

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

Due to our policy of continuous product improvement specifications may change without notice

→ AW1502 Lamp Standard Pole



Fubular Poles Fixed

AW1502/10/DD

Height range 3m - 15m

Altron lamp standard CCTV poles are a versatile, high specification range of poles, designed to look like traditional lamp posts, but are very heavy duty, specifically to give the rigidity required for CCTV camera mounting. The range is ideal for medium to heavy duty applications, including dual CCTV and lighting, where we offer a full range of accessories to support this use. There are also lighter duty (LD) models, which are more economically suited for fixed camera and light PTZ installations.

o Car parks

ο

Retail Parks

Sports stadia

o Railway platforms & car parks

Typically used for the following types of installation

- Public area urban CCTV o
- Highways

o

- Industrial and commercial premises o
- Schools and universities
- **Security Features**
- Internal cabling о
- Close fitting flush doors o
- Solid secure heavy duty door locks o
- 0 Anchor bolts below ground level

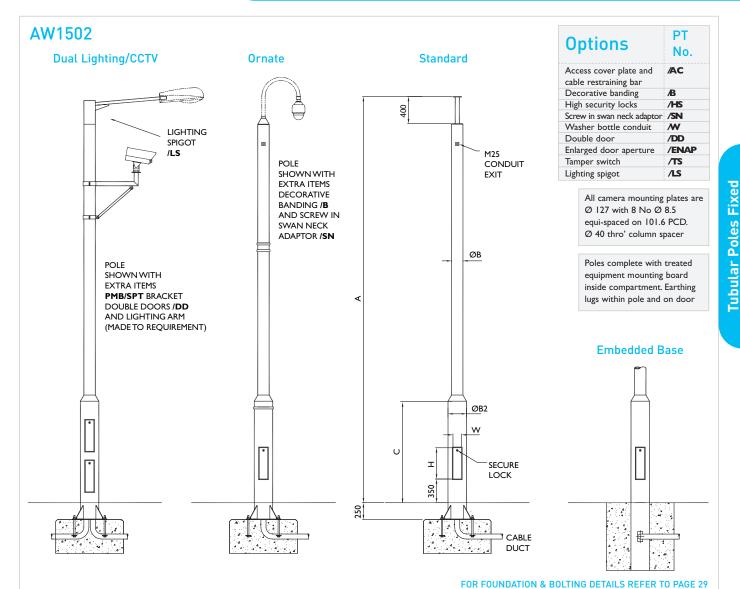
General Features

- Stable structures for all camera types
- Versatile range with many accessories for both CCTV and dual lighting use 0
- Double door versions available for dual CCTV and lighting, keeping services separate o
- Enlarged door version available where additional equipment mounting capacity is required 0
- 0 Compartments have doors that are close fitting and flush with heavy duty secure locks and are complete with treated backboard
- Available in bolt down and embedded/direct burial versions 0
- A wide range of standard Altron accessories and Brackets available о
- Pole adaptations available to suit customers/project specific requirements о
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability о
- Option of painting over the galvanised finish in colours available from BS and RAL colour charts ο
- Also available in 316 stainless steel, architectural finish o
- For design, manufacturing and finishing standards, see details on page 107 ο





AW1502 Lamp Standard Pole ← **Technical Specification**



Model No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Shaft ØB	Base ØB2	Base height C	Door aperture size H x W	Product weight kgs
AW1502/3	3	40	0.25	139	219	1100	362x126	99
AW1502/4	4	40	0.25	139	219	1100	362x126	117
AW1502/5	5	40	0.25	168	273	1500	462x126	192
AW1502/5LD	5	25	0.2	139	219	1500	362×126	135
AW1502/6	6	40	0.25	168	273	1500	462×126	214
AW1502/6LD	6	25	0.2	139	219	1500	362x126	153
AW1502/7	7	40	0.25	168	273	1500	462x126	236
AW1502/7LD	7	25	0.2	139	219	1500	362x126	171
AW1502/8	8	40	0.25	168	273	1500	462x126	258
AW1502/8HD	8	50	0.5	219	323	1900	425×177	353
AW1502/9	9	40	0.25	219	323	1900	425×177	382
AW1502/10	10	40	0.25	219	323	1900	425X177	453
AW1502/10H	D 10	50	0.5	273	355	1900	425×177	614
AW1502/11	11	40	0.25	273	355	1900	425×177	657
AW1502/12	12	40	0.25	273	355	1900	425x177	700
AW1502/13	13	40	0.25	273	355	1900	425x177	743
AW1502/14	14	40	0.25	273	355	1900	425x177	786
AW1502/15	15	40	0.25	273	355	1900	425x177	829

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

Accessories Top mounting brackets for Fixed and PTZ cameras P76 Swanneck brackets for Dome cameras P8 I Anti-climb guards P77 Clamp-on camera mounting brackets P79 Telemetry box mounting brackets P77 Pole top mounting cages P83 PIR mounting ring

Quick reference							
Single fixed camera knuckle	PTS-I						
Twin fixed camera bracket	TB2-600F						
Half swanneck for dome	AW1699H						
Full swanneck for dome	AW1699F						
Anti climb guard	SGC						
PIR mounting ring	AW1962						
Telemetry bracket	ATBC						

P84

& Tilt Down

→ AW1859 & AW4460 Tubular Tilt Down Poles



AW4460/4



AW1859/5

Height range 4m - 12m

The AW4460 is a light duty tilt down tubular pole more suitable for fixed camera and dome installations, whereas the AW1859 range is a heavier duty product suitable for medium to heavy PTZ applications. Both products give a neat and aesthetic appearance and are suitable for installations where the public have access, whilst enabling camera equipment to be serviced at ground level. Flush doors and secure locks make these secure products, designed for security installations. A full range of standard accessories back up this comprehensive range of tilt down poles.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Schools and universities
- o Prisons and detention facilities
- o Railway platforms & car parks
- o Car parks
- o Public area CCTV
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks
- o Internal padlock facility to protect against un-authorised lowering
- o Can be mounted with anchor bolts below ground level

General Features

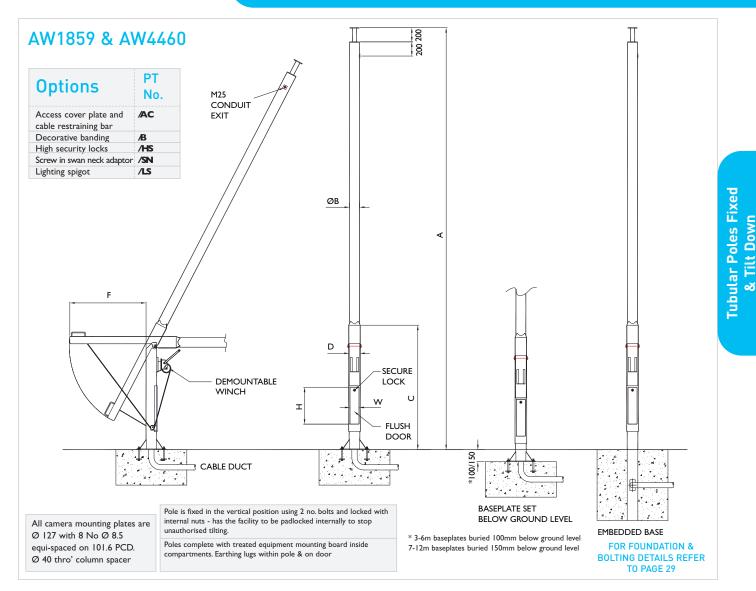
- o Stable structures for all camera types
- o Suitable for public access areas
- o Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- o Compartments have doors that are close fitting and flush with heavy duty secure locks and are
 - complete with treated backboard
- o Available in bolt down and embedded/direct burial versions
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



AW1859/6 in tilted position

Tubular Poles Fixed & Tilt Down

AW1859/4460 Tubular Tilt Down Pole ← **Technical Specification**



Model No.	Height in mtrs A	Max equip weight at pole top kgs	Max equip surface area m ²	Pole ØB	Post size D ²	Post height C	Pole rear clearance when tilting F	Door aperture H x W	Winch part number	Product weight kgs
AW4460	TILT-DOW	N POLES -	suitable fo	or loads (up to ligh	t PTZ and	d dual dom	e applicatio	ons	
AW4460	/4 4	25	0.25	114	150	1700	1350	500×110	DW1000/	60 115
AW4460	/5 5	25	0.25	114	150	1700	1350	500×110	DW1000/	50 30
AW4460	/ 6 6	25	0.25	114	150	1700	1350	500×110	DW1000/	50 145
AW4460	/ 7 7	25	0.25	139	150	2000	1800	500×110	DW1500/	50 198
AW4460	/8 8	25	0.25	139	150	2000	1800	500×110	DW1500/	50 216
AW1859 AW1859		<mark>'N POLES -</mark> 40	suitable fo 0.40	or heavie 139	r PTZ ap	plications 1700	and for he	eights up to 500x110	0 12m DW1000/	59 125
AW1859	/5 5	40	0.40	139	150	1700	1350	500×110	DW1000/	59 47
AW1859	/ 6 6	30	0.40	139	150	1700	1350	500×110	DW1000/	59 170
AW1859	/ 7 7	30	0.40	168	180	2000	1800	500×130	DW1500/	59 253

180

200

200

200

200

2000

2700

2700

2700

2700

				Cameras	
dome 50	applicatio	DW1000/60	115	Anti-climb guards	P77
				Clamp-on camera mounting	P79
50	500×110	DW1000/60	130	brackets	
50	500×110	DW1000/60	145	Telemetry box mounting brackets	P77
00	500×110	DW1500/60	198	Pole top mounting cages	P83
00	500×110	DW1500/60	216	PIR mounting ring	P84
or he	ights up to	12m		8	101

DW1500/59 275

DW2500/59 427

DW2500/59 453

DW2500/59 479

40 I

DW2500/59

Quick refere	nce
Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	АТВС

Accessories

P76

P81

Top mounting brackets for Fixed and PTZ cameras

Swanneck brackets for Dome

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

0.40

0.40

0.40

0.30

0.25

168

193

193

193

193

AW1859/8

AW1859/9

AW1859/10 10

AW1859/11 ||

AW1859/12 12

8

9

30

30

30

25

25

1800

2400

2400

2400

2400

500×130

500x140

500x140

500×140

500×140

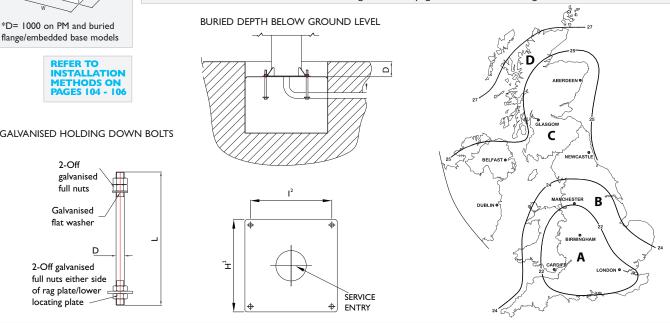
\rightarrow Tubular Poles - Fixed & Tilt-Down Foundations & Bolting Details

ODEL NO.	HEIGHT MTRS	õ Ĕ	BURIED DEPTH 'D'	L H	SERVICE ENTRY SIZE	HOLDING BOLT SIZE D × L	<u> </u>	UNTRY LOCAT	ION	т		N
	Ξ²	BOLT CENTRES 'I	BB	BASE PLATE SIZE 'H ^{2,}	S III	R D R	AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
W1502 - lan	nn star											
N1502/4	4m	350	250	405	200	M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
N1502/5	5m	450	250	510	250	M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	l.l x l.l x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
V1502/6	6m	450	250	510	250	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	I.I x I.I x 0.5
VI502/7	7m	450	250	510	250	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6
V1502/8	8m	550	250	630	250	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
V1502/8HD	8m	550	250	630	250	M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
V1502/10	10m	550	250	630	250	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
V1502/10HD	10m	700	250	800	300	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
N1502/12	I2m	700	250	800	300	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
N1502/15	I5m	700	250	800	300	M27x600	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.0	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0
V1859 - tub	ular ti	lt-dow	n									
W1859/4	4m	350		405	120	M16x245	0.9 x 09 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 09 x 0.5	0.9 x 09 x 0.5	1.0 x 1.0 x 0.5
W1859/5	5m	350		405	120	M16x245	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55
W1859/6	6m	350		405	120	M16x245	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6
N1859/7	7m	450		510	150	M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	l.l x l.l x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
V1859/8	8m	450		510	150	M20x325	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
W1859/10	10m	550		630	180	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
W1859/12	I2m	550		630	180	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8
V4460 - tub			n									
V4460/4	4m	350		405	120	M16x245	0.9 x 09 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.8 x 0.8 x 0.4	0.9 x 09 x 0.5	0.9 x 0.9 x 0.5
N4460/6	6m	350		405	120	M16x245	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	l.l x l.l x 0.55	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	l.l x l.l x 0.55
W4460/8	8m	450		510	150	M20x325	1.2 x 1.2 x 0.6	1.2 × 1.2 × 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
ibular poles												
V1755/4	4m	350		405	110	M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.8 x 0.8 x 0.4	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
V1592/5	5m	350		405	110	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5
N1592/6	6m	350		405	110	M16x245	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 × 1.1 × 0.55	1.0 × 1.0 × 0.5	1.0 × 1.0 × 0.5	1.1 × 1.1 × 0.55
N1507/7	7m	450		510	150	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 × 1.2 × 0.6	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 × 1.2 × 0.6
N1507/8	8m 9m	450		510 630	150	M20x325	1.2 × 1.2 × 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 × 1.2 × 0.6
N1581/9 N1581/10	9m I0m	550 550		630	180 180	M24x425 M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
		550		630	100	11242425	1.3 × 1.3 × 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
edium duty		250		405		MI 4 0 45						
N1592/4	4m	350		405	110	MI6x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	0.9 × 0.9 × 0.5	0.9 × 0.9 × 0.5	1.0 x 1.0 x 0.5
N1507/5	5m	450		510 510	150	M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.2 × 1.2 × 0.6	1.0 x 1.0 x 0.5	1.0 × 1.0 × 0.5	1.1 × 1.1 × 0.55
N1507/6	5m 7m	450 450		510		M20x325	1.1 x 1.1 x 0.55	1.2 × 1.2 × 0.6	1.2 × 1.2 × 0.6	1.1 × 1.1 × 0.55	1.1 × 1.1 × 0.55	1.2 × 1.2 × 0.6
N1581/7 N1581/8	8m	550		630	180 180	M20x325 M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 × 1.2 × 0.6	1.3 x 1.3 x 0.65
N1576/9	9m	550		630	200	M24x425	1.3 x 1.3 x 0.65 1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7 1.5 x 1.5 x 0.75	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 × 1.3 × 0.65
N1576/10	10m	550		630	200	M24x425	1.4 x 1.4 x 0.7 1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75 1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65 1.4 x 1.4 x 0.7	l.4 x l.4 x 0.7 l.5 x l.5 x 0.75	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8
eavy duty NI507/4	4.00	350		405	150	M16x245				09,09,05		
N1507/4	4m 5m	450		510	180	M20x325	1.0 x 1.0 x 0.5 1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5 1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55 1.2 x 1.2 x 0.6	0.9 x 0.9 x 0.5 1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5 1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5
N1581/6	6m	450		510	180	M20x325	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$ $1.2 \times 1.2 \times 0.6$	1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65	1.0 x 1.0 x 0.5 1.1 x 1.1 x 0.55	$1.1 \times 1.1 \times 0.55$ $1.2 \times 1.2 \times 0.6$	1.1 x 1.1 x 0.55
N1576/7	7m	450		510	200	M20x325	1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65
N1576/8	8m	550		630	200	M24x425	1.3 x 1.3 x 0.85	1.3 x 1.3 x 0.85	1.4 x 1.4 x 0.7 1.5 x 1.5 x 0.75	1.2 x 1.2 x 0.6 1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.85
W1631/9	9m	550		630	250	M24x425	1.4 x 1.4 x 0.7	$1.4 \times 1.4 \times 0.7$ $1.5 \times 1.5 \times 0.75$	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.85	1.5 x 1.5 x 0.85	1.4 x 1.4 x 0.7
W1631/10	10m	550		630	250	M24x425	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	$1.5 \times 1.5 \times 0.75$	1.5 x 1.5 x 0.75	1.7 x 1.7 x 0.9
W1631/12	12m	550		630	250	M24x425	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0
pered tubu												
N2207/4	4m	350	250	405	150	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5
N2207/6	6m	450	250	510	200	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	I.I x I.I x 0.55	1.2 x 1.2 x 0.6
N2207/8	8m	450	250	510	200	M20x325	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 × 1.2 × 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
e dimensions i	n mm											

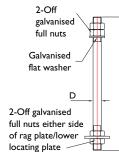
for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these. A minimum soil bearing capacity of 75 kN/m^2 is assumed.

• Foundation base dimensions are typical and may vary depending on site conditions.

Please refer to the foundations & windloading section on pages 101-103 for further guidance.



GALVANISED HOLDING DOWN BOLTS



Tubular Poles Fixed & Tilt Down

Cabinet Based Poles Gallery \leftarrow

Altron Cabinet Based Poles are versatile and robust with the facility for 2 or more compartments therefore making them ideal for multiple use installations - such as CCTV and traffic light mounting.



AW1545/6/DD/UP with gold banding



AW1545/6/DD/UP with gold banding



AW1545/6/300/DD/UP with banding and screw in swan neck

\rightarrow Cabinet Based Poles Gallery



AW1545/5/TD/UP



AW1545/8/UP



AW1545/8/UP



AW1545/6/UP in stainless steel

Cabinet Based Poles \leftarrow



Cabinet Based Poles

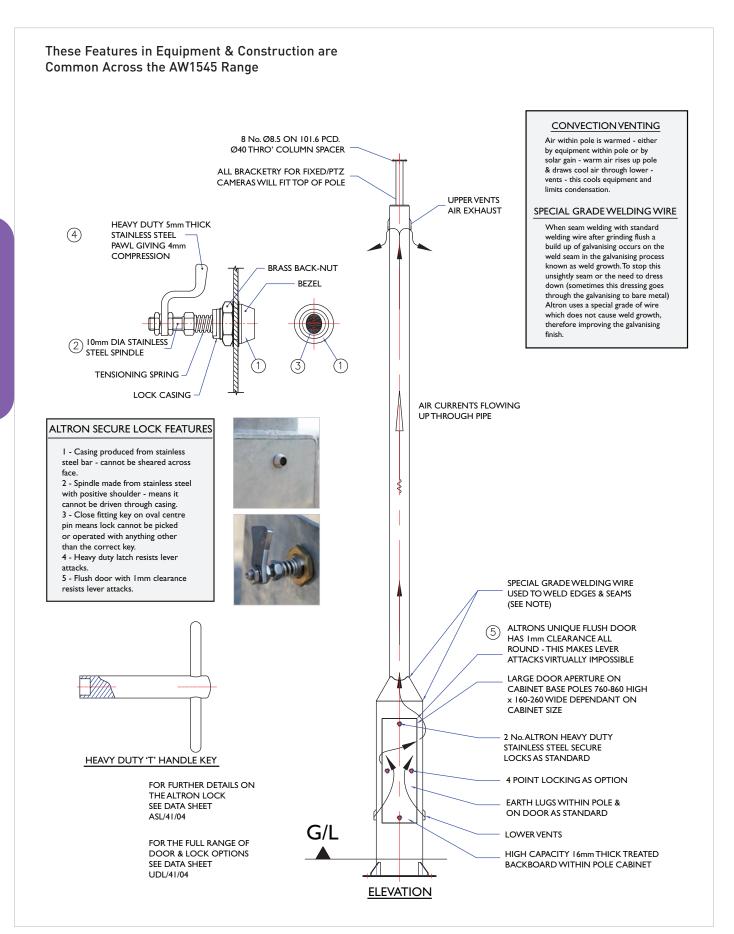
Altron AW1545 cabinet based camera poles were originally introduced in 1994 as the first CCTV cabinet based pole product. They have been used and specified extensively since then and are now a common feature in urban areas throughout the UK. Ideal for mounting camera equipment within, they provide a cost effective installation and reduce street furniture and clutter. The tilt-down range enables camera equipment to be serviced easily at ground level, without the need for a man lift. Recent developments have been aimed at producing a clean and aesthetic outline, whilst enhancing security, so close fitting flush doors and our heavy duty secure locks are now common across the range.

The AW2075 Cylindrical cabinet based version, with parallel or tapered shafts are popular for installations with an architectural theme.

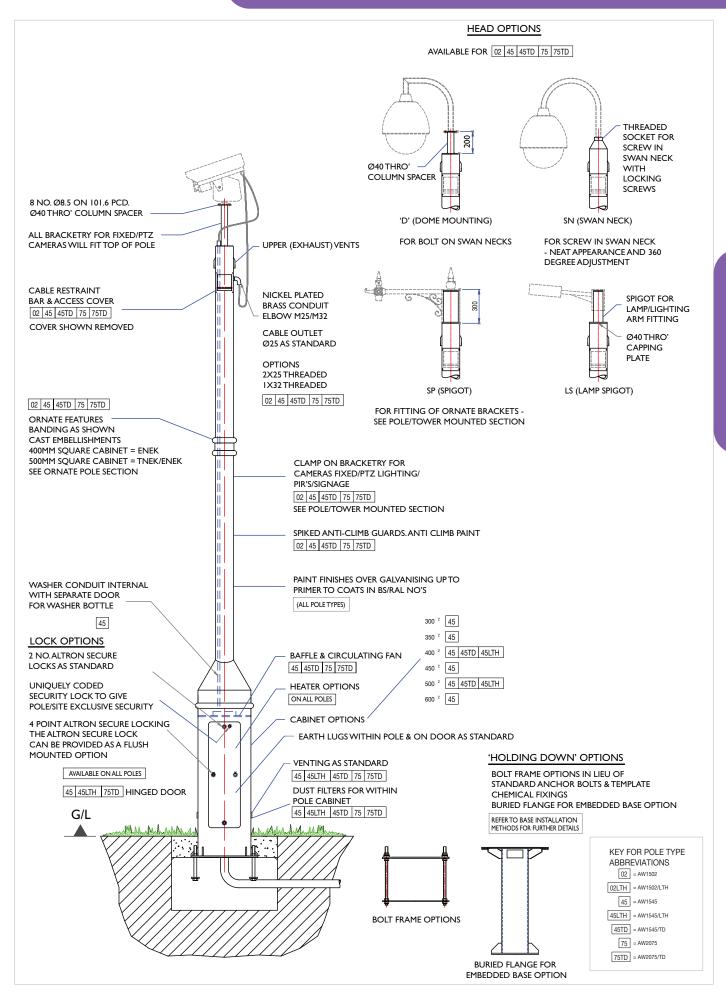
Altron's numerous security design features ensure a good level of protection against vandal attacks.

Due to our policy of continuous product improvement specifications may change without notice

\rightarrow Features of Urban Highway Poles



Options of Urban Highway Poles \leftarrow



Cabinet Based Poles

\rightarrow AW1545/UP Cabinet Based Pole



Fixed height range 4m - 15m Tilt Down height range 4m -12m

Designed to meet the specific demands of urban area CCTV, our range of high specification cabinet based poles come as standard with venting, high security locks and high capacity, good quality, treated back boards. With many cabinet sizes, door options and head mounting options, backed up with a full range of accessories, the AW1545 UP pole range offers a comprehensive solution for urban CCTV installations.

Typically used for the following types of installation

- o Public area urban CCTV
- o Highways
- o Industrial and commercial premises
- o Schools and universities
- o Prisons and detention facilities
- o Utilities sites
- o Railway platforms & car parks
- o Car parks
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks and high security lock
- o Secure venting method
- o Internal padlock facility on tilt down poles to protect against un-authorised lowering
- o Anchor bolts below ground level

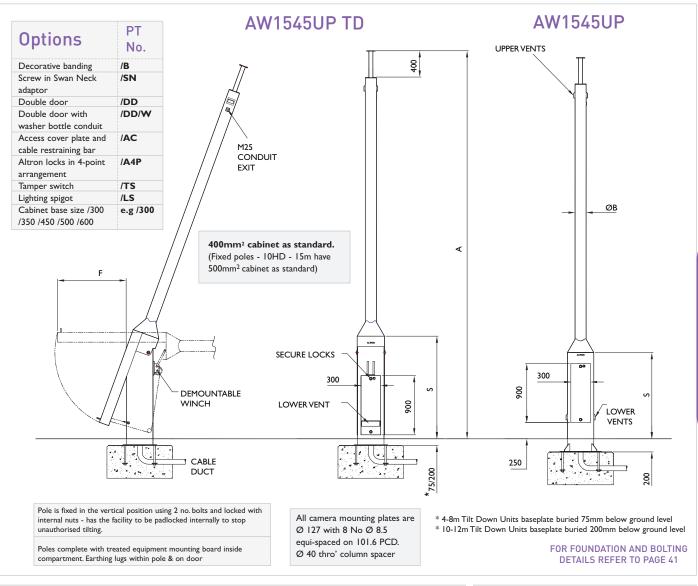
General Features

- o Stable structures for all camera types
- o Available in 6 standard cabinet sizes, 300, 350, 400, 450, 500 and 600 square (400mm square as standard if not specified)
- o Flush fitting door, level with cabinet surface, no external frame combined with flush fitting Altron secure locks and a high security lock giving enhanced security and a clean aesthetic appearance
- o 4 point security door locking option
- o Standard convection venting eliminates condensation (when the pole base is properly sealed on installation)
- o Baffle vents to IP55 available as option
- o Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



AW1545/6TD/UP in tilted position

→ AW1545/UP Cabinet Based Pole Technical Specification



Model I No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Pole ØB	Cabinet height above ground S	Pole rear clearance when tilting F		Product weight kgs
AW1545UP-Fi	xed							
AW1545/4/UP	4	40	0.25	168	1300	-	-	216
AW1545/5/UP	5	40	0.25	168	1300	-	-	238
AW1545/6/UP	6	40	0.25	168	1300	-	-	260
AW1545/7/UP	7	40	0.25	168	1300	-	-	292
AW1545/8/UP	8	40	0.25	168	1300	-	-	314
AWI 545/8HD/UP	8	50	0.5	219	1650	-	-	350
AW1545/9/UP	9	40	0.25	219	1650	-	-	425
AW1545/10/UP	10	40	0.25	219	1650	-	-	496
AW1545/10HD/U	P 10	50	0.5	273	1650	-	-	780
AW1545/12/UP	12	40	0.25	273	1650	-	-	866
AW1545/15/UP	15	40	0.25	273	1650	-	-	995
AW1545UP TE	-Tilt	Down						
WI545/4TD/UP	4	40	0.25	168	1625	1150 I	DW1000/45	246
WI545/6TD/UP	6	30	0.25	168	1625	1150 I	DW1000/45	290
WI545/8TD/UP	8	25	0.25	168	1625	1150 I	DW1500/45	335
AW1545/10TD/UF	• 10	40	0.25	219	2650	2150 I	DW2500/45	668

219

2650

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

25

0.25

AW1545/12TD/UP 12

Accessories Top mounting brackets for Fixed and PTZ cameras P76 Swanneck brackets for Dome P81 cameras Anti-climb guards P77 Clamp-on camera mounting P79 brackets Telemetry box mounting brackets P77 Pole top mounting cages P83 PIR mounting ring P84

Quick reference							
Single fixed camera knuckle	PTS-I						
Twin fixed camera bracket	TB2-600F						
Half swanneck for dome	AW1699H						
Full swanneck for dome	AW1699F						
Anti climb guard	SGC						
PIR mounting ring	AW1962						
Telemetry bracket	АТВР						

Due to our policy of continuous product improvement specifications may change without notice

2150 DW2500/45

726

\rightarrow AW1545/BAS Cabinet Based Pole



AW1545/8/BAS

Fixed height range 4m - 12m Tilt Down height range 4m - 12m

The 'basic' AW1545 BAS cabinet based pole range offers a cost effective means of mounting CCTV equipment within the one pole structure. More commonly used for industrial and commercial type installations, it does not have venting and high security locks, that come as standard on the UP range, but does offer the other security features common to our cabinet based poles and also the clean, aesthetic appearance, common to the AW1545 ranges and is backed up with a full range of accessories.

Typically used for the following types of installation

- Public area CCTV 0
- Industrial and commercial premises ο
- Schools and universities o
- Prisons and detention facilities o
- Utilities sites ο
- Railway platforms & car parks
- 0 Car parks
- **Retail Parks** ο
- Sports stadia 0

Security Features

- Internal cabling o
- Close fitting flush doors
- Solid secure heavy duty door locks o
- Internal padlock facility on tilt down poles to protect against un-authorised lowering o

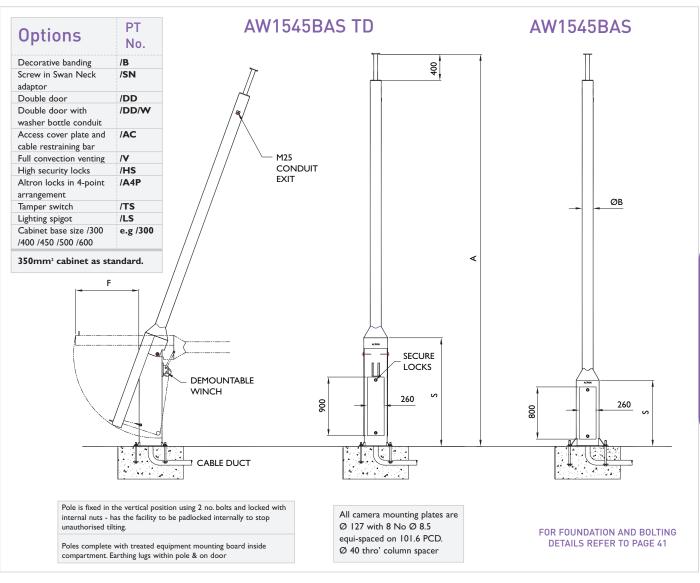
General Features

- Stable structures for all camera types 0
- Available in 6 standard cabinet sizes, 300, 350, 400, 450, 500 and 600 square (350mm square as standard if not specified)
- Flush fitting door, level with cabinet surface, no external frame combined with flush fitting Altron secure o locks giving enhanced security and a clean aesthetic appearance
- Treated wooden backboard within cabinet 0
- 4 point security door locking option
- Demountable winches allow for a secure installation whilst also reducing costs on multiple installations ο
- A wide range of standard Altron Accessories and Brackets available o
- Pole adaptations available to suit customers/project specific requirements 0
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability ο
- 0 Option of painting over the galvanised finish in colours available from BS and RAL colour charts
 - For design, manufacturing and finishing standards, see details on page 107



AW1545/6TD/BAS in tilted position

AW1545/BAS Cabinet Based Pole Technical Specification ←



Model No.	Height in mtrs A	Max equip weight at top	Max equip surface area	Pole ØB	Cabinet height above ground	Pole rear clearance when tilting	Winch part number	Product weight kgs	Ţ
		kgs	m²		S	F			3
AW1545BAS-F	ixed								/
AW1545/4/BAS	4	40	0.25	168	1000	-	-	153	(
AW1545/5/BAS	5	40	0.25	168	1000	-	-	175	
AW1545/6/BAS	6	40	0.25	168	1000	-	-	197	
AW1545/7/BAS	7	40	0.25	168	1000	-	-	219	1
AW1545/8/BAS	8	40	0.25	168	1000	-	-	251	F
AW1545/8HD/BAS	8	50	0.5	193	1300	-	-	341	
AW1545/9/BAS	9	40	0.25	193	1300	-	-	371	
AW1545/10/BAS	10	40	0.25	193	1300	-	-	401	
AW1545/12/BAS	12	40	0.25	193	1300	-	-	462	
									-
AW1545BAS T	D-Tilt	Down							ł

AWI545/4TD/BAS	4	40	0.25	168	1700	1150	DW1000/45	236
AW1545/6TD/BAS	6	30	0.25	168	1700	1150	DW1000/45	280
AW1545/8TD/BAS	8	25	0.25	168	1700	1150	DW1500/45	334
AW1545/10TD/BAS	10	40	0.25	193	2850	2150	DW2500/45	592
AW1545/12TD/BAS	12	25	0.25	193	2850	2150	DW2500/45	643

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

Accessories Top mounting brackets for Fixed and PTZ cameras P76 Swanneck brackets for Dome P81 cameras Anti-climb guards P77 Clamp-on camera mounting brackets P79 Telemetry box mounting brackets P77 Pole top mounting cages P83 PIR mounting ring P84

Quick reference								
Single fixed camera knuckle	PTS-I							
Twin fixed camera bracket	TB2-600F							
Half swanneck for dome	AW1699H							
Full swanneck for dome	AW1699F							
Anti climb guard	SGC							
PIR mounting ring	AW1962							
Telemetry bracket	АТВР							

Cabinet Based Poles

Fixed height range 4m - 10m Tilt Down height range 4m -10m

An architectural range of high specification cabinet based poles based on the AW1545 UP pole specification, but with a cylindrical cabinet and either a parallel or tapered pole shaft. These poles come as standard with venting, high security locks and high capacity, good quality, treated back boards.

Typically used for the following types of installation

- o Public area urban CCTV
- o Retail Parks
- o To fit in with other architectural tapered street furniture
- o Sports stadia

Security Features

- o Internal cabling
- o Solid secure heavy duty door locks and high security lock
- o Secure venting method
- o Additional security measures available
- o Internal padlock facility on tilt down poles to protect against un-authorised lowering
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o 4 point security door locking option
- o Standard convection venting eliminates condensation (when the pole base is properly sealed on installation)
- o Baffle vents to IP55 available as option
- o Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



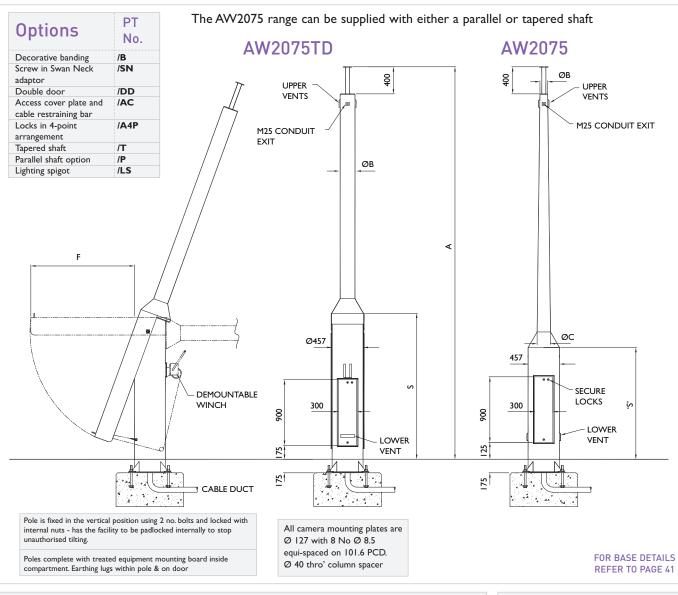
AW2075/6 with ornate finial



h ornate finial

AW2075/8

AW2075 Cabinet Based Pole Technical Specification \leftarrow



Model No.	Height in mtrs A	Max equip weight at pole top	Max equip surface area m ²	Parallel shaft ØB	Tapered shaft bottom ØC	Tapered shaft Top ØB	Cabinet height above ground S	Pole rear clearance when tilting F		Product weight kgs
		kgs								
AW2075-F	ixed									
AW2075/4	4	40	0.25	168	153	114	1200	-	-	208
AW2075/5	5	40	0.25	168	171	114	1200	-	-	230
AW2075/6	6	40	0.25	168	189	114	1200	-	-	252
AW2075/7	7	40	0.25	168	230	140	1200	-	-	274
AW2075/8	8	40	0.25	219	248	140	1650	-	-	318
AW2075/9	9	40	0.25	219	266	140	1650	-	-	364
AW2075/10	10	40	0.25	219	284	140	1650	-	-	410
AW2075 T	D-Tilt	down								
AW2075/4T	D 4	40	0.25	168	144	114	1800	1350	DW1000/7	5 362

AW2075/4TD 40 0.25 168 144 114 1800 114 1800 1350 AW2075/6TD 6 30 0.25 168 180 140 1800 1350 AW2075/8TD 25 0.25 219 239 8

219

275

140

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

0.25

25

AW2075/10TD 10

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference								
Single fixed camera knuckle	PTS-I							
Twin fixed camera bracket	TB2-600F							
Half swanneck for dome	AW1699H							
Full swanneck for dome	AW1699F							
Anti climb guard	SGC							
PIR mounting ring	AW1962							
Telemetry bracket	ATBP							

2150

2150

DW1000/75

DW1500/75

DW2500/75

402

478

581

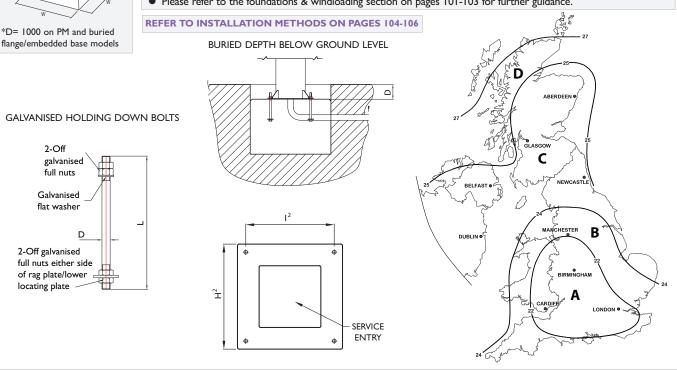
\rightarrow Cabinet Based Poles Foundations & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES '1 ^{2,}	BASE PLATE SIZE 'H ^{2,}	BURIED DEPTH 'D'	SERVICE ENTRY SIZE	HOLDING DOWN BOLT SIZE D X L	FOUNDA	TION SIZE	S FOR THE	UK		
	ĘΣ	8 É	H B/	EP1	ITR, ER	ZE VOL	CO	UNTRY LOCAT	ION	тс	WN LOCATIO	N
		Ü	PLA	<u> </u>	, Z	тоы	AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
W1545/UP												
ked cabinet bas	ed pole	. Standa	rd cabin	et base si	ze of 400mm	2						
W1545/4	4	550	630	200	370x370	M24x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
W1545/5	5	550	630	200	370x370	M24x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 × 0.9 × 0.5	$1.0 \times 1.0 \times 0.5$	$1.0 \times 1.0 \times 0.5$
W1545/6	6	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 × 1.1 × 0.55	1.1 x 1.1 x 0.55
W1545/7	7	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6
WI545/8	8	550	630	200	370x370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
WI545/8/HD	8	550	630	200	370×370	M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	I.4 x I.4 x 0.7
AW1545/9	9	550	630	200	370×370	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	I.4 x I.4 x 0.7
WI545/10	10	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
AW1545/10/HD		700	800	200	470x470	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
AW1545/12	12	700	800	200	470x470	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
WI545/I5	15	700	800	200	470x470	M27×600	1.9 x 1.9 x 1.0	2.0 × 2.0 × 1.0	2.1 × 2.1 × 1.0	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0
W1545/UP/T ilt-down cabinet		pole. Sta	andard c	abinet bas	se size of 400)mm ²						
AW1545/4TD	4	550	630	75	370x370	M24x325	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5
AW1545/6TD	6	550	630	75	370x370	M24x325	1.0 x 1.0 x 0.5	$1.0 \times 1.0 \times 0.3$ $1.2 \times 1.2 \times 0.6$	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5
AW1545/8TD	8	550	630	75	370x370	M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.5 x 1.5 x 0.05	$1.2 \times 1.2 \times 0.6$	1.3 x 1.3 x 0.65	1.2 × 1.2 × 0.65
AW1545/10TD	10	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
WI545/12TD	12	550	630	200	370x370	M24x425	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
W1545/BAS	ed nole	Standa	rd cabin	et hase si	ze of 350mm	2						
AW1545/4	4	450	510	N/A	330x330	M20x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
AW1545/5	5	450	510	N/A	330x330	M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	$1.0 \times 1.0 \times 0.5$	$1.0 \times 1.0 \times 0.5$
AW1545/6	6	450	510	N/A	330x330	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$	$1.0 \times 1.0 \times 0.5$	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
AW1545/7	7	450	510	N/A	330x330	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	$1.2 \times 1.2 \times 0.6$
AW1545/8	8	550	630	N/A	330x330	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 × 1.2 × 0.6	1.3 x 1.3 x 0.65
AW1545/8HD	8	550	630	N/A	330x330	M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1545/9	9	550	630	N/A	330x330	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7
AW1545/10	10	550	630	N/A	330x330	M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1545/12	12	550	630	N/A	330x330	M24x425	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.4 x 1.4 x 0.7	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
W1545/BAS/	TD											
ilt-down cabinet	based	pole. Sta	andard c	abinet bas	se size of 350)mm ²						
AW1545/4TD	4	450	510	75	330x330	M20x325	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	l.l x l.l x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5
AW1545/6TD	6	450	510	75	330x330	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6
AW1545/8TD	8	550	630	75	330x330	M24x425	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.65	1.5 x 1.5 x 0.05	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW1545/10TD		550	630	200	330x330	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
	12	550	630	200	330x330	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8
AW2075 - AW2 both fixed and tilt			vo a Ø/5	7mm cab	inet hase on	ly.						
						-			10 10 07			
AW2075/4	4	450	510	200	Ø420	M20x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 × 0.9 × 0.5	0.9 × 0.9 × 0.5
AW2075/6	6	450	510	200	Ø420	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
AW2075/8	8	550 550	630	200 200	Ø420	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
AW2075/10	10	220	630		Ø420	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
able dimensions i	n mm			E	Base plate an	d bolt sizes are	for the standard cabine	t sizes shown. For o	ther cabinet sizes p	ease contact our te	chnical department	for confirmation of
oundation sizes in Dimensions in me		are W x	WxD		or area D or area C,		nd exposed locat		n above sea lev	el for areas A,	B and 150m at	oove sea level

• A minimum soil bearing capacity of 75 kN/m² is assumed.

Foundation base dimensions are typical and may vary depending on site conditions. •

• Please refer to the foundations & windloading section on pages 101-103 for further guidance.



Cabinet Based Poles

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Altron anti-vandal poles have a range of smart design features that ensure they are the toughest products available on the market. They have been successfully installed for many years in inner city areas of Belfast, London, Manchester, Glasgow, Leeds and many other high risk areas.

- o Higher initial expenditure, but significant cost savings through not having to replace expensive camera equipment repeatedly
- o Reduces camera down time and service call outs

o

- AW1545/AVD, AW1665 and AW1664 poles look like standard cabinet based camera poles, therefore minimising visual impact
- o Fire retardant upgrade to cabinet available on AW1664 and AW1663 pole variations



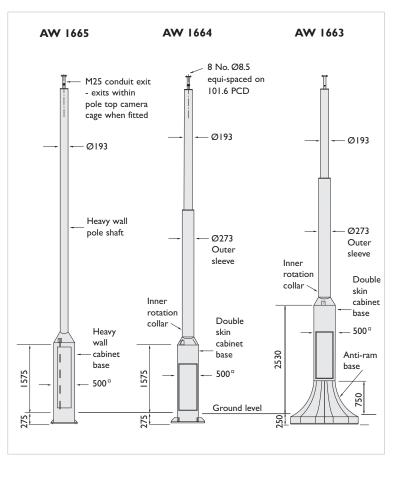
	AW1545/AVD	AW1665	AW1664	AW1663
Double Skin Base			•	•
Anti-Ram Base				•
Double Skin Pole Section			•	•
Dead Bolt Door Locking Mechanism	•	•	•	•
Heavy Wall Cabinet	•	•	•	•
Strengthened Base Plate and Increased				
Holding Down Capacity		•	•	•
High Security Door Locks	•	•	•	•
Double Door Access			•	•
Holding Down Bolts Below Ground Level	•	•	•	•
Stainless Steel Hinges on Outer Door		•	•	•
No Locks on Outer Door	•	•	•	•

o AW1545/AVD not shown below, is based on the AW1545/UP cabinet based pole range (see p35)

All poles are hot dip galvanised to ISO 1461 as standard and painting to colours from BS and RAL colour charts, over the galvanised finish is available as an optional extra

AW1664





Cabinet Based Poles

\rightarrow Gallery - Ornate Poles

Altron ornate camera poles are used extensively throughout Central London



Ornate Poles \leftarrow





AW1545/8/HNEK

AW1545/6/TNEK

Altron ornate poles are based on our cabinet based AW1545 UP range and our AW1502 lamp standard range. They incorporate all of the benefits of these standard pole ranges, but are appropriate for historic and sensitive locations where the camera pole needs to blend in with surrounding street furniture and architecture. The standard range is made up of the most popular variations, but we can also provide poles with a specific architectural theme for individual projects.

Altron's numerous security design features ensure a good level of protection against vandal attacks.

\rightarrow Ornate Poles



AW1545 - ENEK-HNEK-TNEK

Height range 4m - 15m

Ornate versions of the AW1545 UP cabinet base pole range, incorporating cast embellishment kits to enhance the pole appearance. Ideally suited to areas of historical or architectural importance where CCTV systems are required to blend aesthetically with their surroundings. A full range of ornate brackets and accessories ensure an authentic installation.

Typically used for the following types of installation

- o Public area urban CCTV
- Historic sites
- Private residences

Security Features

o Internal cabling

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- Close fitting flush doors Solid secure heavy duty door locks and high security lock
- o Solid secure heavy dutyo Secure venting method
- Additional security measures available
- Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Flush fitting door, level with cabinet surface, no external frame combined with flush fitting Altron secure locks and a high security lock giving enhanced security and a clean aesthetic appearance
- 4 point security door locking option
- Standard convection venting eliminates condensation (when the pole base is properly sealed on installation)
- A wide range of ornate Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
 - For design, manufacturing and finishing standards, see details on page 107



AW1502 - ENEK

Height range 4m - 10m

Ornate version of the AW1502 lamp standard range. The cast embellishment kits enhance the pole appearance and are often used to match ornate features of existing lighting columns to bring conformity to street furniture but ensuring cameras are on a stable pole built for CCTV use. A full range of ornate brackets and accessories ensure an authentic installation.

Typically used for the following types of installation

- o Public area urban CCTV
- o Historic sites
- o Private residences

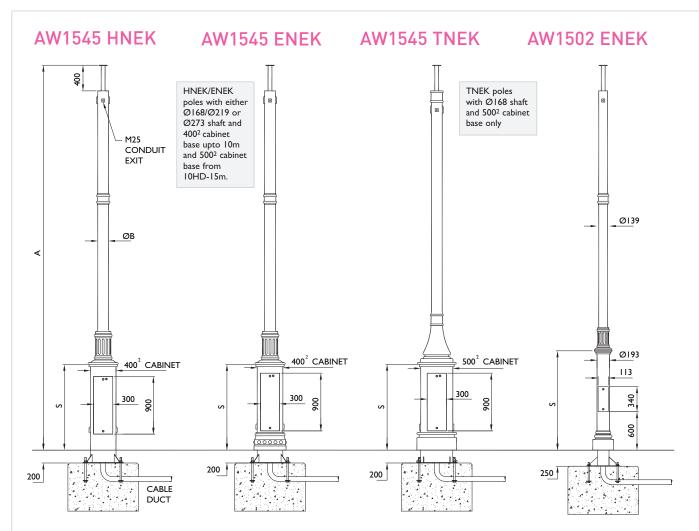
Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks and high security lock
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Versatile range with many accessories for both CCTV and dual lighting use
- o Double door versions available for dual CCTV and lighting, keeping services separate
- o Compartments have doors that are close fitting and flush with heavy duty secure locks and are complete with treated backboard
- o Available in bolt down and embedded/direct burial versions
- o A wide range of ornate Altron accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107

Ornate Poles Technical Specification \leftarrow



FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 49

Model No. Add suffix eg	Height in mtrs	Max equip weight at top	Max equip surface area m ²	Pol Øl		ba	binet Ise ² ize		t height ground S	Product weight kgs	
AW1545/4/TNĔK	Α	kgs		ENEK\ HNEK	TNEK	ENEK\ HNEK	TNEK	ENEK\ HNEK	TNEK	U	Or bra car
AW1545/4	4	40	0.25	168	168	400	500	1300	1300	397	
AW1545/5	5	40	0.25	168	168	400	500	1300	1300	418	Or
AW1545/6	6	40	0.25	168	168	400	500	1300	1300	436	Cai
AW1545/7	7	40	0.25	168	168	400	500	1300	1300	490	Cla
AW1545/8	8	40	0.25	168	168	400	500	1300	1300	517	mo
AW1545/8HD	8	40	0.25	219	-	400	-	1300	-	548	An
AW1545/9	9	40	0.25	219	168	400	500	1650	1650	619	
AW1545/10	10	40	0.25	219	168	400	500	1650	1650	702	Tel
AW1545/10HD	10	40	0.25	273	-	500	-	2000	-	820	bra
AW1545/12	12	40	0.25	273	-	500	-	2000	-	920	PIF
AW1545/15	15	40	0.25	273	-	500	-	2000	-	1090	

Model No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Base height S	Product weight kgs
AW1502/3/ENEK	3	40	0.50	1100	126
AW1502/4/ENEK	4	40	0.50	1100	144
AW1502/5/ENEK	5	30	0.50	1500	162
AW1502/6/ENEK	6	30	0.40	1500	180
AW1502/7/ENEK	8	25	0.30	1500	198
AW1502/8/ENEK	10	25	0.25	1500	216

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

Accessories	
Ornate top mounting brackets for Fixed and PTZ cameras	P48
Ornate brackets for Dome cameras	P48
Clamp-on ornate camera mounting brackets	P48
Anti-climb guards	P77
Telemetry box mounting brackets	P77
PIR mounting ring	P84

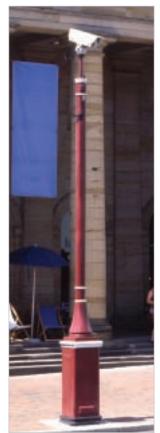
Quick reference								
Pole top dome brkt	PT-1689							
Pole top Fixed	PT-1689/SF							
Pole top PTZ brkt	PT-1689/SPT							
Telemetry bracket	АТВР							

→ Embellishment Details

Altron embellishments are produced to a high standard in cast aluminium or cast iron. Our standard embellishment ranges are shown in detail below. We also provide castings designed to meet specific customer requirements, examples are shown on p43, embellishments produced for Westminster Council.

AW1545 HNEK





AW1545 TNEK



Тор



Mid









AW1545 ENEK



Тор



Mid



AW1502 ENEK





Тор

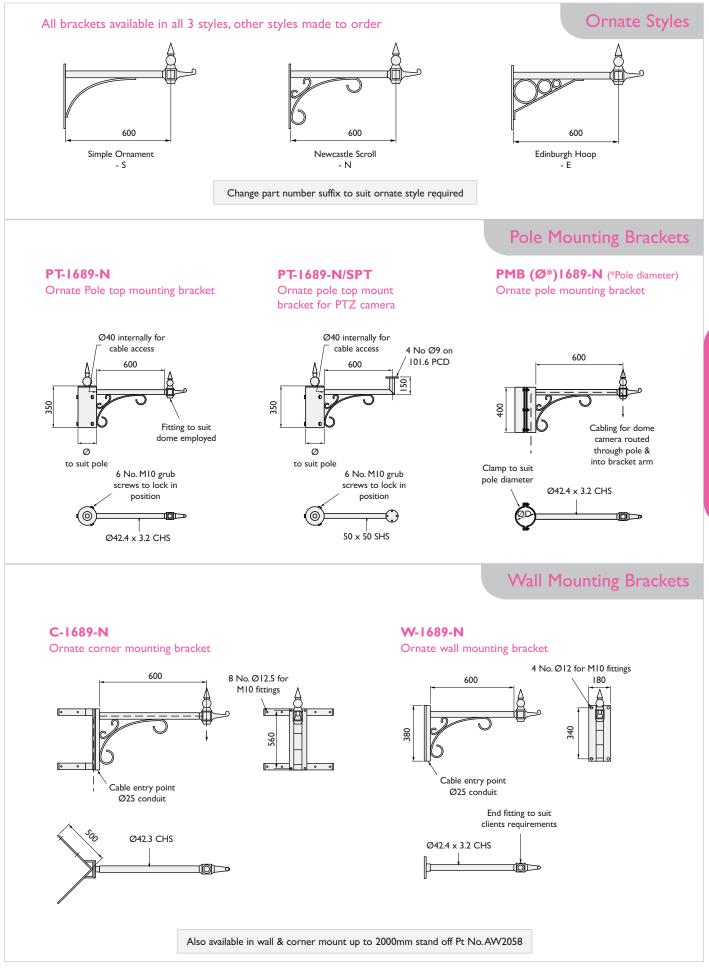




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Ornate Poles

Ornate Brackets \leftarrow



Ornate Poles

MODEL NO.	HEIGHT MTRS	BOLT CENTRES '1 ^{2,}	BASE PLATE SIZE 'H ² '	BURIED DEPTH 'D'	SERVICE ENTRY SIZE	HOLDING SIZE D X L	FOUNDA			UK		
	Ĕ	8 É	Ъ	l L L L L L L L L L L L L L L L L L L L		E A OL	COUNTRY LOCATION			TOWN LOCATION		
	-	Ü	PLA		E s	Ξ O IS	AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
AW1545UP - E	ENEK-	HNEK-	TNEK	Fixed cab	inet based p	oles. 400 ²						
cabinet base for E	ENEK &	HNEK a	ind 500 ²	cabinet b	ase on TNE	(
AW1545/4	4	550	630	200	370×370	M24x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
AW1545/5	5	550	630	200	370×370	M24x325	$1.0 \times 1.0 \times 0.5$	l.l x l.l x 0.55	l.l x l.l x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
AW1545/6	6	550	630	200	370×370	M24x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	$1.0 \times 1.0 \times 0.5$	1.1 x 1.1 x 0.55	I.I x I.I x 0.55
AW1545/7	7	550	630	200	370×370	M24x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	l.l x l.l x 0.55	1.2 x 1.2 x 0.6
AW1545/8	8	550	630	200	370×370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
AW1545/8/HD	8	550	630	200	370×370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
AW1545/9	9	550	630	200	370×370	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	I.4 x I.4 x 0.7
AW1545/10	10	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
AW1545UP - E Fixed cabinet ba	Sed pol	HNEK les. 500 ²	(TNEK n ² cabine	iot availa t base as	ble in these standard.	sizes).						
AW1545UP - E Fixed cabinet ba AW1545/10/HD	SNEK- sed pol	HNEK les. 500 ² 700	(TNEK n ² cabine 800	ot availa t base as 200	ble in these standard. 470x470	sizes). M27×600	1.4 × 1.4 × 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
AW1545UP - E Fixed cabinet ba AW1545/10/HD AW1545/12	NEK- sed pol 10 12	HNEK les. 500 ² 700 700	(TNEK n ² cabine 800 800	ot availa t base as 200 200	ble in these standard. 470x470 470x470	sizes). M27x600 M27x600	1.4 × 1.4 × 0.7 1.6 × 1.6 × 0.8	1.5 x 1.5 x 0.75 1.7 x 1.7 x 0.9	1.6 x 1.6 x 0.8 1.8 x 1.8 x 0.9	1.4 × 1.4 × 0.7 1.5 × 1.5 × 0.75	1.4 × 1.4 × 0.7 1.6 × 1.6 × 0.8	1.5 x 1.5 x 0.75 1.7 x 1.7 x 0.9
AW1545UP - E Fixed cabinet ba AW1545/10/HD	ENEK- sed pol 10 12 15 EK	HNEK les. 500 ² 700 700 700	(TNEK n ² cabine 800	ot availa t base as 200	ble in these standard. 470x470	sizes). M27×600	1.4 × 1.4 × 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
AW1545UP - E Fixed cabinet ba AW1545/10/HD AW1545/12 AW1545/15 AW1502 - ENE	ENEK- sed pol 10 12 15 EK ndard pol 3	HNEK les. 500 ² 700 700 700	(TNEK n ² cabine 800 800 800 800	ot availa t base as 200 200	ble in these standard. 470x470 470x470	sizes). M27x600 M27x600	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4	1.5 x 1.5 x 0.75 1.7 x 1.7 x 0.9 2.0 x 2.0 x 1.0 0.8 x 0.8 x 0.4	1.6 x 1.6 x 0.8 1.8 x 1.8 x 0.9 2.1 x 2.1 x 1.0 0.9 x 0.9 x 0.5	1.4 x 1.4 x 0.7 1.5 x 1.5 x 0.75 1.8 x 1.8 x 0.9 0.8 x 0.8 x 0.4	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4	1.5 × 1.5 × 0.75 1.7 × 1.7 × 0.9 2.0 × 2.0 × 1.0 0.8 × 0.8 × 0.4
AW1545UP - E Fixed cabinet ba AW1545/10/HD AW1545/12 AW1545/15 AW1502 - ENE ubular lamp star AW1502/3	ENEK- sed pol 10 12 15 EK	HNEK les. 500 ² 700 700 700 0les.	(TNEK n ² cabine 800 800 800	ot availa t base as 200 200 200	ble in these standard. 470x470 470x470 470x470 470x470	sizes). M27x600 M27x600 M27x600	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0	I.5 x I.5 x 0.75 I.7 x I.7 x 0.9 2.0 x 2.0 x I.0	1.6 x 1.6 x 0.8 1.8 x 1.8 x 0.9 2.1 x 2.1 x 1.0	I.4 x I.4 x 0.7 I.5 x I.5 x 0.75 I.8 x I.8 x 0.9	I.4 x I.4 x 0.7 I.6 x I.6 x 0.8 I.9 x I.9 x I.0	1.5 x 1.5 x 0.75 1.7 x 1.7 x 0.9 2.0 x 2.0 x 1.0
AW1545UP - E Fixed cabinet ba AW1545/10/HD AW1545/12 AW1545/15 AW1502 - ENE ubular lamp star AW1502/3 AW1502/4	ENEK- sed pol 10 12 15 EK ndard pol 3	HNEK les. 500 ² 700 700 700 0les. 350	(TNEK n ² cabine 800 800 800 800	ot availa t base as 200 200 200 200	ble in these standard. 470×470 470×470 470×470 200	sizes). M27x600 M27x600 M27x600 M16x245	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4	1.5 x 1.5 x 0.75 1.7 x 1.7 x 0.9 2.0 x 2.0 x 1.0 0.8 x 0.8 x 0.4	1.6 x 1.6 x 0.8 1.8 x 1.8 x 0.9 2.1 x 2.1 x 1.0 0.9 x 0.9 x 0.5	1.4 x 1.4 x 0.7 1.5 x 1.5 x 0.75 1.8 x 1.8 x 0.9 0.8 x 0.8 x 0.4	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4	1.5 × 1.5 × 0.75 1.7 × 1.7 × 0.9 2.0 × 2.0 × 1.0 0.8 × 0.8 × 0.4
AW1545UP - E Fixed cabinet ba AW1545/10/HD AW1545/12 AW1545/15 AW1502 - ENE ubular lamp star AW1502/3 AW1502/4 AW1502/5	ENEK- sed pol 10 12 15 EK ndard pol 3 4	HNEK 100 100 100 100 100 100 100 10	(TNEK n ² cabine 800 800 800 800 405	ot availa t base as 200 200 200 200 250	ble in these standard. 470x470 470x470 470x470 200 200	sizes). M27x600 M27x600 M27x600 M16x245 M16x245	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4 0.9 x 0.9 x 0.5	$\begin{array}{c} 1.5 \times 1.5 \times 0.75 \\ 1.7 \times 1.7 \times 0.9 \\ 2.0 \times 2.0 \times 1.0 \end{array}$ $\begin{array}{c} 0.8 \times 0.8 \times 0.4 \\ 0.9 \times 0.9 \times 0.5 \end{array}$	1.6 x 1.6 x 0.8 1.8 x 1.8 x 0.9 2.1 x 2.1 x 1.0 0.9 x 0.9 x 0.5 0.9 x 0.9 x 0.5	$\begin{array}{c} 1.4 \times 1.4 \times 0.7 \\ 1.5 \times 1.5 \times 0.75 \\ 1.8 \times 1.8 \times 0.9 \end{array}$ $\begin{array}{c} 0.8 \times 0.8 \times 0.4 \\ 0.9 \times 0.9 \times 0.5 \end{array}$	$\begin{array}{c} 1.4 \times 1.4 \times 0.7 \\ 1.6 \times 1.6 \times 0.8 \\ 1.9 \times 1.9 \times 1.0 \end{array}$ 0.8 × 0.8 × 0.4 0.9 × 0.9 × 0.5	1.5 × 1.5 × 0.75 1.7 × 1.7 × 0.9 2.0 × 2.0 × 1.0 0.8 × 0.8 × 0.4 0.9 × 0.9 × 0.5
AW1545UP - E Fixed cabinet ba AW1545/10/HD AW1545/12 AW1545/15 AW1502 - ENE tubular lamp star	ENEK- sed pol 10 12 15 EK ndard pol 3 4 5	HNEK les. 500 700 700 700 0les. 350 350 350	(TNEK n ² cabine 800 800 800 800 800 405 405	ot availa t base as 200 200 200 200 250 250 250	ble in these standard. 470x470 470x470 470x470 200 200 250	sizes). M27x600 M27x600 M27x600 M16x245 M16x245 M16x245	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4 0.9 x 0.9 x 0.5 1.1 x 1.1 x 0.55	$\begin{array}{c} 1.5 \times 1.5 \times 0.75 \\ 1.7 \times 1.7 \times 0.9 \\ 2.0 \times 2.0 \times 1.0 \end{array}$ 0.8 x 0.8 x 0.4 0.9 x 0.9 x 0.5 1.1 x 1.1 x 0.55	1.6 x 1.6 x 0.8 1.8 x 1.8 x 0.9 2.1 x 2.1 x 1.0 0.9 x 0.9 x 0.5 0.9 x 0.9 x 0.5 1.2 x 1.2 x 0.6	$\begin{array}{c} 1.4 \times 1.4 \times 0.7 \\ 1.5 \times 1.5 \times 0.75 \\ 1.8 \times 1.8 \times 0.9 \end{array}$ 0.8 \times 0.8 \times 0.4 0.9 \times 0.9 \times 0.5 1.0 \times 1.0 \times 0.5	1.4 x 1.4 x 0.7 1.6 x 1.6 x 0.8 1.9 x 1.9 x 1.0 0.8 x 0.8 x 0.4 0.9 x 0.9 x 0.5 1.0 x 1.0 x 0.5	1.5 × 1.5 × 0.75 1.7 × 1.7 × 0.9 2.0 × 2.0 × 1.0 0.8 × 0.8 × 0.4 0.9 × 0.9 × 0.5 1.1 × 1.1 × 0.55

Foundation sizes in table are $W \times W \times D$ Dimensions in metres

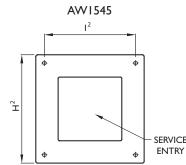
• For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.

A minimum soil bearing capacity of 75 kN/m^2 is assumed.

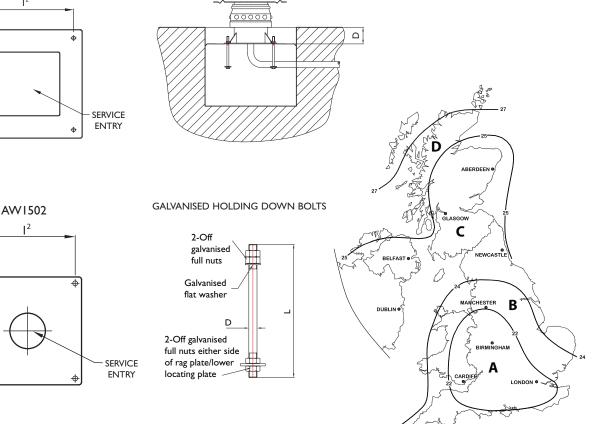
Foundation base dimensions are typical and may vary depending on site conditions. •

• Please refer to the foundations & windloading section on pages 101-103 for further guidance.

REFER TO INSTALLATION METHODS ON PAGES 104-106



DEPTH BELOW GROUND LEVEL



*D= 1000 on PM and buried flange/embedded base models

 H^2

Transport & Infrastructure Products \leftarrow



ACC4BPLA on deployable base



AW1545/6/500/LTH with twin arm



AW 1545/4/LTH special



Low emission zone cantilever pole

Altron Produce a range of products to satisfy most highways applications. Lowering trolley head poles that comply with HA requirements, deployable products for temporary road works and cantilever poles for ANPR and variable speed monitoring.

Altron's numerous security design features ensure a good level of protection against vandal attacks.



Lowering Trolley Head Poles \leftarrow



AW1545/LTH Cabinet Based







AW1502/LTH/168/SN Slim Line Lamp Standard

We have developed a range of features for our Lowering Trolley Head poles, to make them easy, reliable and above all, safe to use. These features mean that a pole with the relevant options included, can be operated by one man standing on the ground, without the need for steps, or the need to support heavy camera loads, when lowering the camera into the upright maintenance position. This therefore is the safest and easiest to operate Lowering Trolley Head pole available on the market today.

Altron's numerous security design features ensure a good level of protection against vandal attacks.

→ Lowering Trolley Head Poles



Height ranges AW1545/LTH & AW1502/LTH 4m - 15m Height range AW1502/LTH/168 Slim-line 4-10m

Altron Lowering Trolley Head Poles enable CCTV equipment to be serviced at ground level, safely, without the need for a man lift or a clear area to tilt the pole over. This is particularly useful in locations where road closures would otherwise be required, pavement locations and pedestrianised areas or where it is not possible to get a man lift and there is no space to tilt the pole over. The AW1545 cabinet based version offers a fully integrated solution, where equipment is mounted in the base of the pole, so no separate street cabinet is required.

Typically used for the following types of installation

- Where access to the camera location is restricted o Railway platforms & car parks
- o Public area urban CCTV
- o Highways
- o Prisons and detention facilities
- o Car parks o Retail Parks
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks and high security lock
- o Secure venting method
- o Internal padlock facility available to stop unauthorised access to winch mechanism
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Design complies with Highways Agency specification.
- o Trolley Head locks solidly in the raised position by means of a cam lever uplatch, meaning that there is no movement in the Trolley Head when the camera is in operation.
- AW1545/LTH cabinet based version also available with 500 square cabinet for additional equipment mounting capacity.
- o Flush doors and secure locks as standard, enhance security and appearance.
- o Standard convection venting on AW1545/LTH version eliminates condensation (when the pole base is properly sealed on installation)
- o Unique slim-line version up to 10 metres in height, using a 168 diameter shaft, giving an extremely slim outline silhouette.
- o A wide range of standard Altron Accessories available
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107

AW1502/10LTH/DDA

Infrastructure Products

Fransport &

Pole Options Explained

Our lowering trolley head pole range is made up of the basic units, part numbers AW1502/LTH and AW1545/LTH. We offer a full range of upgrades as additions to the basic poles, as outlined below. All additional options are explained further in the following pages.

Basic pole (AWI 502/LTH)

Lamp standard version with no back board within the winch compartment. Winch is auto-braking and manually operated and the trolley head neck is fixed. Quick release uplatch included as standard. Trackway is extra.

Basic pole with cabinet base (AW1545/LTH)

As the AW1502/LTH, but with a cabinet base. There are twin doors as standard, front and back with equipment mounting boards within both compartments. Trackway is extra.

Addition /DO, Drill Operated dual drum winch

This winch requires the Drill winding unit DW/DO to operate it. This enables the trolley head to be lowered using the DW/DO, rather than the manually operated the winch. Winch has dual drum, so two cables are employed, with the second cable as a failsafe. Trackway is fitted as standard with this option.

Addition of /TR - Trackway.

The benefit of Trackway, is to keep the trolley head aligned when lowering and raising, in high wind conditions (an extra item on the basic pole models).

Addition of the /DDA Drop Down Arm.

Our patented Drop Down Arm, enables camera equipment to be brought down to waist height, for maintenance, without having to support the weight of the camera equipment by hand.

Addition of the /RA, Rotating Arm and /SN-RA Swan Neck Rotating Arm option

This is ideally suited for dome mounting using our swan neck, or for light PTZ applications. This is a cost effective way of getting camera equipment down to ground level for maintenance. We do not recommend this option for heavier PTZ applications, of loads over 10 kgs.

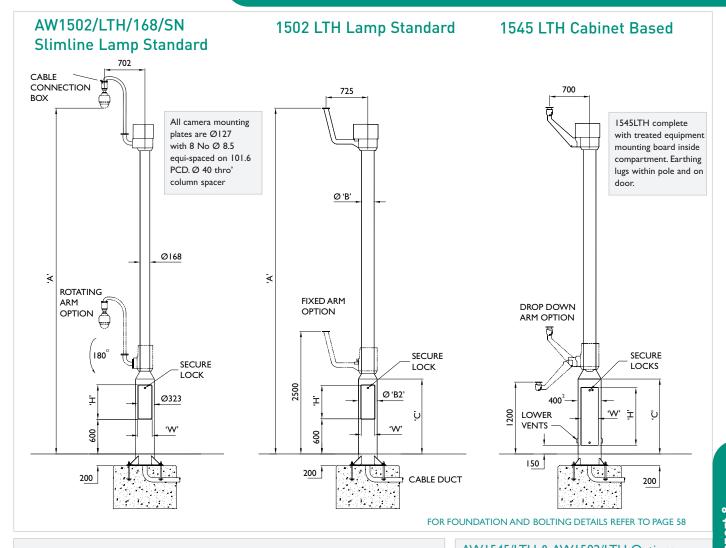
Addition of /CM, Cable Management

Cable management enables camera cables to be disconnected and marshalled through the pole automatically.

Cable pulley configurations

A number of pulley configurations are available for the head of the pole, depending on the type of cable being used to feed the camera. Please contact our Sales team who will provide further information and advice.

Lowering Trolley Head Poles ← Technical Specifications



Model	Height	Max	Max	Pole	Cabinet	Front	Rear	Product	AV
No.	in	equip	equip	ØB	height	door size	door size	weight	De
	mtrs	weight at top	surface area		above ground	Н×W	Н×W	kgs	Alt
		kgs	m ²		C				Tra
									Du
AW1545/4LTH	4	30	0.25	219	1300	970x270	520x270	281	Up
AW1545/5LTH	5	30	0.25	219	1300	970x270	520x270	310	Dri
AW1545/6LTH	6	30	0.25	219	1300	970x270	520x270	339	Dro
AW1545/7LTH	7	30	0.25	219	1300	970x270	520x270	368	Dro
AW1545/8LTH	8	30	0.25	219	1300	970x270	520x270	397	Cal
AW1545/9LTH	9	30	0.25	219	1300	970x270	520x270	513	Rot
AW1545/10LTH	10	30	0.25	219	1300	970x270	520x270	548	Swa
AW1545/10HDL	TH 10	30	0.25	273	1300	970x270	520x270	738	
AW1545/12LTH	12	30	0.25	273	1300	970x270	520x270	822	A
AW1545/15LTH	15	30	0.25	273	1300	970x270	520x270	910	- 0
						_	_		
Model No.	Height	Max	Max	Shaft ØB	Base ØB2	Base	Door	Product	Hig
INO.	in mtrs	equip weight	equip surface	øв	ØBZ	height C	aperture size	weight kgs	
		at top kgs	area m ²				H×W		AV
AWI502/4LTH	4	30	0.25	219	323	1300	425x177	277	Star
AW1502/5LTH	5	30	0.25	219	323	1300	425x177	306	450

ATTIJUZ/4LITT	т	30	0.25	217	525	1300	7232177	2//	
AW1502/5LTH	5	30	0.25	219	323	1300	425×177	306	
AW 1502/6LTH	6	30	0.25	219	323	1300	425×177	335	
AW1502/7LTH	7	30	0.25	219	323	1300	425×177	364	
AW1502/8LTH	8	30	0.25	219	323	1300	425×177	393	
AW1502/9LTH	9	30	0.25	219	323	1300	425×177	495	
AW1502/10LTH	10	30	0.25	219	323	1300	425×177	530	
AW1502/10HDL	TH 10	30	0.25	273	355	1300	425×177	693	
AW1502/12LTH	12	30	0.25	273	355	1300	425×177	777	
AW1502/15LTH	15	30	0.25	273	355	1300	425×177	861	

Where payloads are greater than those stated above, please contact Altron All dimensions in mm unless stated otherwise

Decorative Banding (on Cabinet only)	/ B
Altron 4 Point Locking	/A4P
Trackway Upgrade (for manually operated poles)	/TR
Dual drum Winch & Drill Winding Device Upgrade (Includes trackway)	/DO
Drill Winding Device	DW/DO
Drop Down Arm for 15kg camera	/DDA/15
Drop Down Arm for 30kg camera	/DDA/30
Cable Management System	/CM
Rotating Arm	/RA
Swan Neck Rotating Arm	/SN-RA

AW1502/LTH only Options High Security Lock

AWI545/LTH Cabinet & Door Configurations

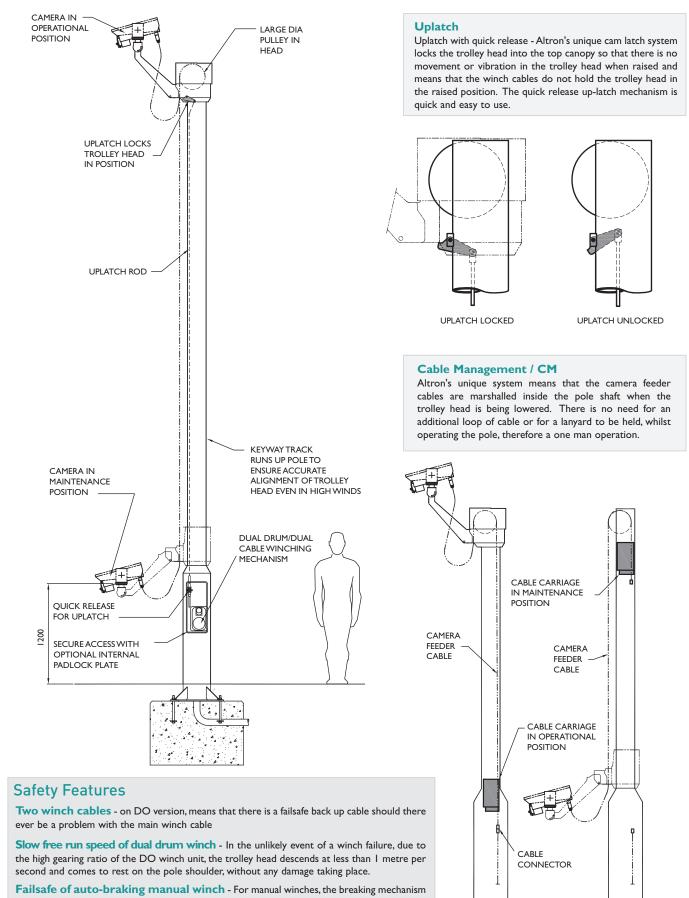
Standard cabinet base size is 400 ² Standard door configuration size door on winch access side & one half size door on opp	
450sq cabinet	/450
500sq cabinet	/500

Accessories AW1545/LTH & AW1502/LTH Manual Winch Winder for Dual Drum Winch //

Manual Winch Winder for Dual Drum Winch	/MWW
Support Bracket for Drill Winding Device	/DSB
Internal Padlock Plate	/IPP

/HS

→ Lowering Trolley Head Poles Options & Features



closes and locks if the friction brake pad should fail, therefore no run-away can take place. **Extensive 'full life' testing** - we have gone through rigorous testing of the winch, cable

and trolley head components to replicate more than 10 years of operation. All parts are manufactured to be either maintenance free, or give maximum life to first maintenance.

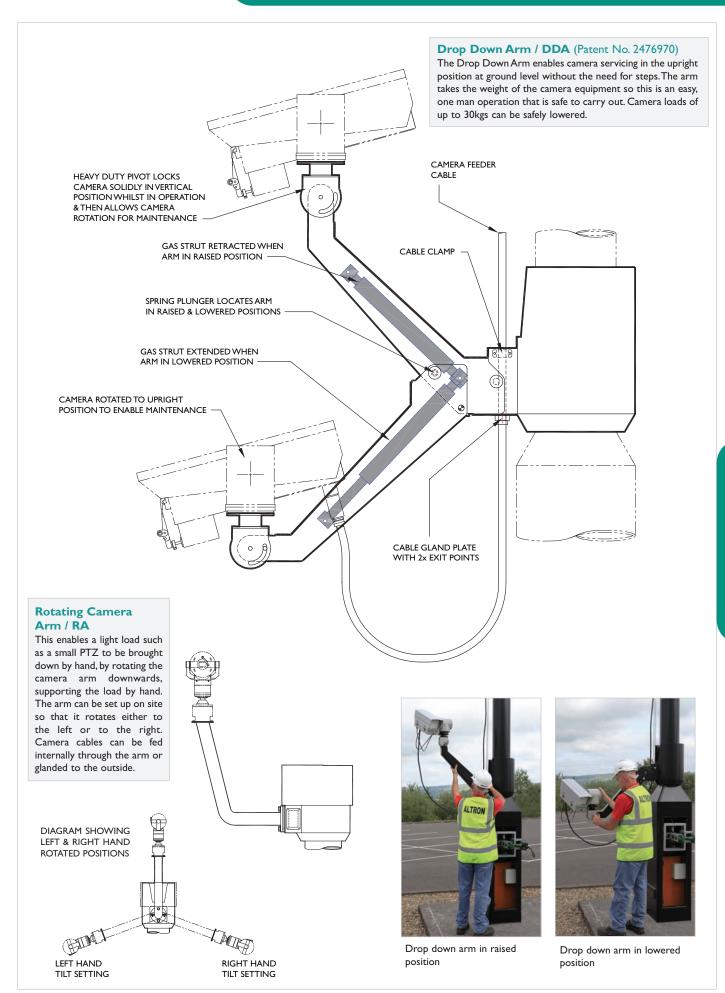
FOR OPERATION

CAMERA IN

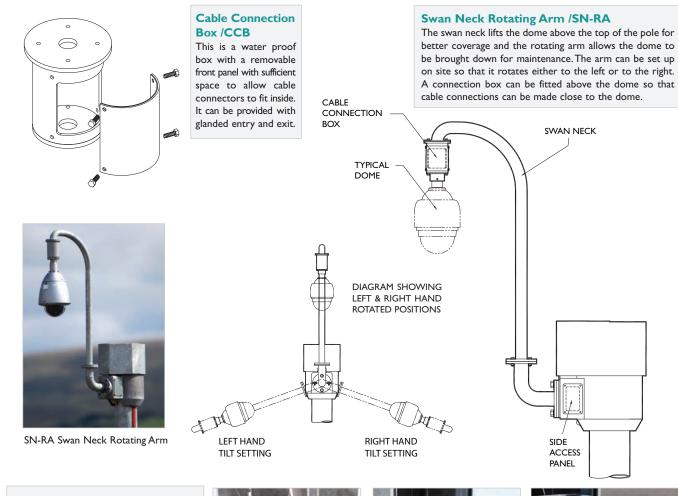
POSITION

MAINTENANCE

Lowering Trolley Head Poles ← Options & Features



→ Lowering Trolley Head Poles Options & Features



Dual Drum Winch / DO Drill Winding Device DW/DO

Dual Drum Winch and Drill Winding Device - The dual drum winch gives complete safety with a second 'safety' winch rope. The drill winding device uses the latest battery technology with a speed limiter and torque lock upgrade, specifically for this application to ensure safe, reliable operation. The Drill winding device is light and transferable, so one device can service many poles. This upgrade meets the requirements of ILE TR7.

Drill Support Bracket / DSB Drill Winding Device Support Bracket this can be incorporated for easy one hand operation and takes the weight of the drill winding device, so operating the pole could not be easier.

Trackway / TR

Trackway Upgrade - Trackway keeps the trolley head running true, when lowering and raising even in very windy conditions. This is standard on /DO pole versions.



DO - Dual drum winch



TR Trackway



DW/DO Drill winder hand held

Internal Padlock Plate / IPP

This is a close fitting internal plate that sits behind the main door, and only comes into view once the door is removed. It will withstand lever attacks and is a second line of defence to make our lowering trolley head poles extremely secure against vandal attacks.



DSB - Drill Support Bracket, with Drill winder located in bracket



IPP Internal Padlock Plate

Lowering Trolley Head Poles ← Foundations & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES '1 ^{2,}	BASE PLATE SIZE 'H ^{2,}	BURIED DEPTH 'D'	SERVICE ENTRY SIZE	HOLDING DOWN BOLT SIZE D X L	FOUNDA		S FOR THE	UK		
Ĕ		BOLT	26 <u>1</u>	n T T		E A P	COUNTRY LOCATION			TOWN LOCATION		
	÷	Ü	PLA	<u> </u>	S A	ΞÖΞ	AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
AW1545/LTH												
cabinet based, lo	wering t	rolley he	ad pole	- all varia	nts							
WI545/LTH/4	4	550	630	200	370×370	M24x325	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5
W1545/ LTH/5	5	550	630	200	370×370	M24x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
WI545/LTH/6	6	550	630	200	370×370	M24x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6
WI545/LTH/7	7	550	630	200	370×370	M24x325	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
AW1545/ LTH/8	8	550	630	200	370×370	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7
WI545/LTH/9	9	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
WI545/LTH/10	10	550	630	200	370×370	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8
WI545/LTH/10	HD 10	700	800	200	370×370	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
WI545/LTH/12	12	700	800	200	370×370	M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0
WI545/LTH/I5	15	700	800	200	370×370	M27x600	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1
AW1502/LTH												
lamp standard, lo	wering	trolley h	ead pole	- all varia	ants							
AW1502/ LTH/4	4	350	510	250	200	M20x325	0.9 x 0.9 x 0.5	1.0 × 1.0 × 0.5	. x . x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5
AW1502/ LTH/5	5	450	510	250	250	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	$1.0 \times 1.0 \times 0.5$. x . x 0.55	, x , x 0.55
AW1502/ LTH/6	6	450	510	250	250	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6
AW1502/LTH/7	7	450	510	250	250	M20x325	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65
AW1502/ LTH/8	8	550	630	250	250	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7
AW1502/ LTH/9	9	550	630	250	250	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75
WI502/LTH/10	10	550	630	250	250	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8
WI502/LTH/10	HD II	500PCD	Ø590	N/A	300	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9
WI502/LTH/12	12	500PCD	Ø590	N/A	300	M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0
AW1502/LTH/15	12	500PCD	Ø590	N/A	300	M27x600	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1

Foundation sizes in table are W x W x D Dimensions in metres

• For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.

A minimum soil bearing capacity of 75 kN/m² is assumed.

Foundation base dimensions are typical and may vary depending on site conditions.

Please refer to the foundations & windloading section on pages 101-103 for further guidance.

BELOW SURFACE MOUNTED

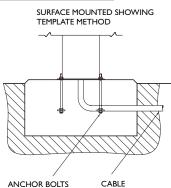
SHOWING BOLT FRAME METHOD

REFER TO INSTALLATION METHODS ON PAGES 104-106

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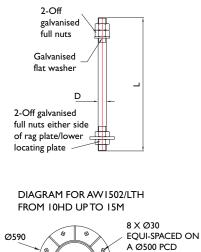
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ANCHOR BOLTS WITH RAG PLATES DUCT



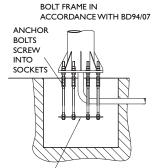


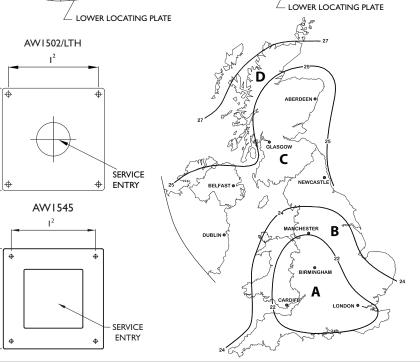
Ø300

ENTRY

FOR SERVICE

Δ \angle LOWER LOCATING PLATE



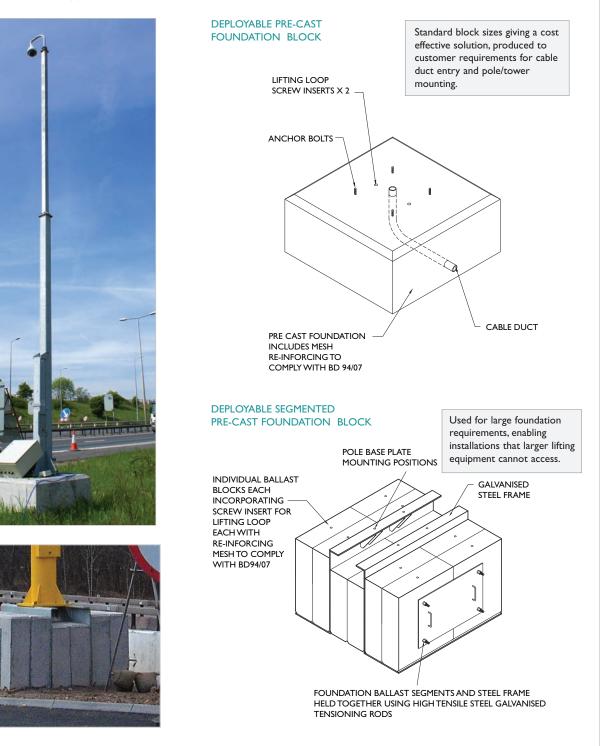


Due to our policy of continuous product improvement specifications may change without notice

With increasing demand for temporary solutions for roadworks and major events, Altron has developed a range of pre-cast foundations that fully comply with HA standards and industry standard foundation requirements. Based on our knowledge gained from rapid deployable products for the telecoms industry, we cast foundations in house at our factory, keeping close control over the process and ship UK wide using specialist vehicles for offloading.

Features & Services

- o Pre cast foundations can be produced to suit any Altron product
- o Ducting arrangements provided to suit customer requirements
- o Proven product and method of delivery, used in many installations over the past 8 years
- o Can be supplied in accordance with Highways Agency requirements
- o Full design service & support



Temporary & Deployable Solutions \leftarrow



Due to our policy of continuous product improvement specifications may change without notice

\rightarrow Cantilever Poles

Cantilever poles are becoming more prevalent for traffic monitoring, average speed camera systems, ANPR, perimeter security and with the increasing need to service camera equipment in a safe area and reduce lane closures and associated costs, the ability to swing the arm in and also in certain applications, lower the equipment to ground level, Altron provide a full design service and range of products that meet these requirements.

Typically used for the following types of installation

- o Roadworks and contraflows
- Highways and trunk roads
- o Adjacent to quarantine areas e.g. adjacent to railway lines
- o Perimeter security

- **Security Features**
- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks
- o Secure venting method on cabinet based poles

Features & Services

- o Full design service to comply with HA requirements, in accordance with BD94/07
- Manufacturing and test procedures comply with the Specification for Highways Works (SHW series 1300)
- In house software used to model structures for analysis of stability and product suitability different camera arrangements can be easily modelled and proposals produced for any location
- $_{\rm o}$ $\,$ Cabinet based versions available, based on our AW1545/UP range
- Flush doors and secure locks as standard, enhance security and appearance.
- Standard convection venting on AW1545/UP version eliminates condensation (when the pole base is properly sealed on installation)
- o A wide range of Altron Accessories available

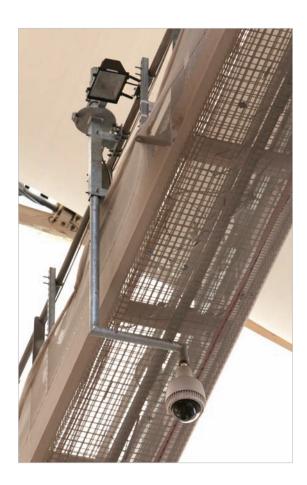




Brackets & Accessories \leftarrow





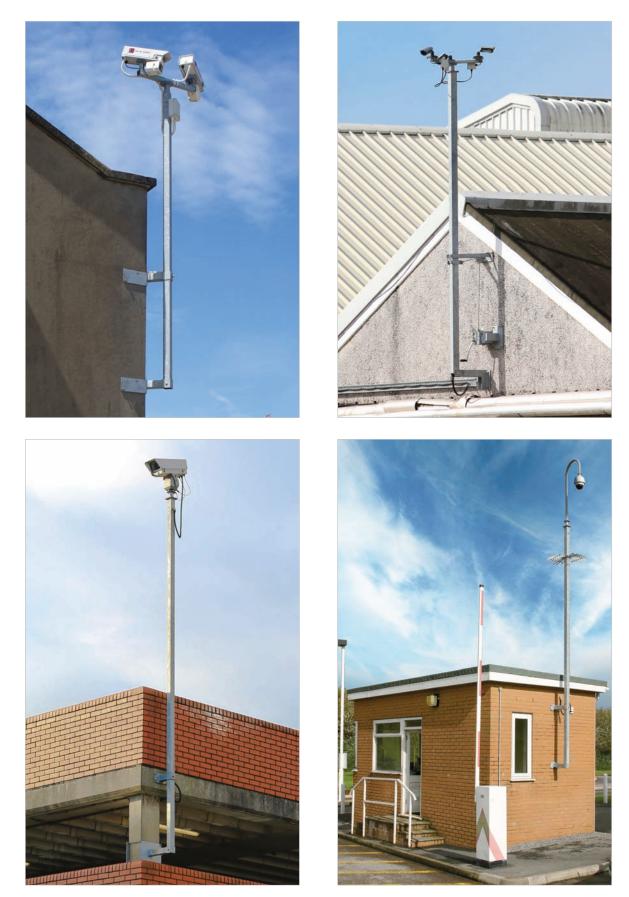




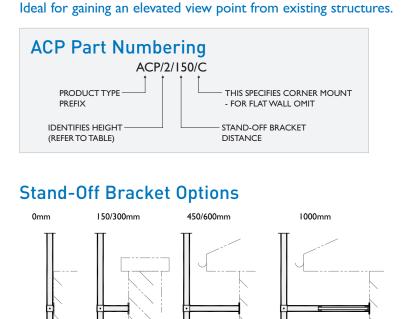


We offer a wide range of brackets and accessories, many available from stock, to suit the many varied camera mounting requirements for the CCTV industry. Where a standard bracket is not available, we produce variations and bespoke brackets on short lead times

\rightarrow Wall Mounted Poles



Ideal for gaining an elevated viewpoint from existing structures, we offer a range of wall and parapet mounted products, both fixed and tilt-down to suit most applications. Many are available from stock and where a standard product does not suit, we provide variations on short lead times.



ACP Wall Mounted Poles

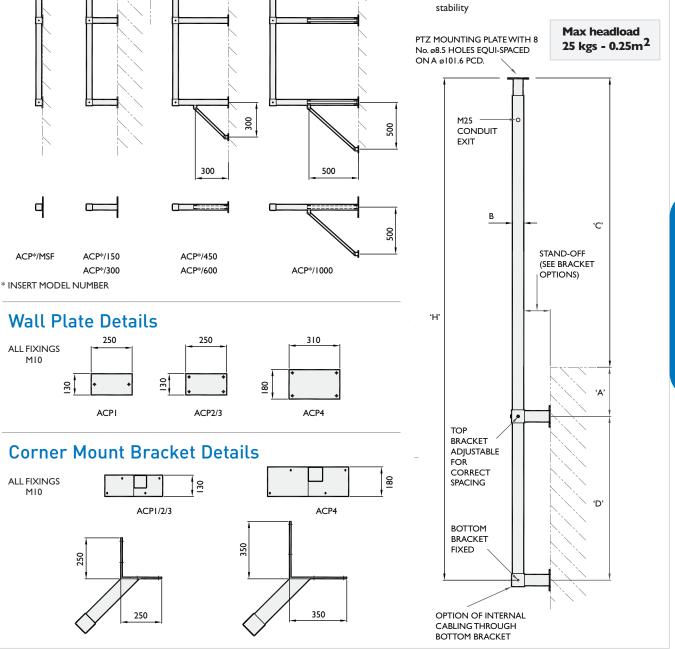
Features

- o Poles up to 6m shipped on carrier for overnight delivery
- o Rigid construction
- o Hot dip galvanised for longevity
- o Full range of accessories available

Model Number	н	В	A	С	D
ACPI	3m	70 ²	0.3m	I.7m	١m
ACP2	4m	80 ²	0.3m	2.2m	I.5m
ACP3	5m	80 ²	0.4m	2.6m	2m
ACP4	6m	90 ²	0.5m	3.5m	2m

• All variations held in stock

- o Dimension 'A' to be maintained for upper bracket fixing strength
- o Dimension 'D' to be maintained for camera stability



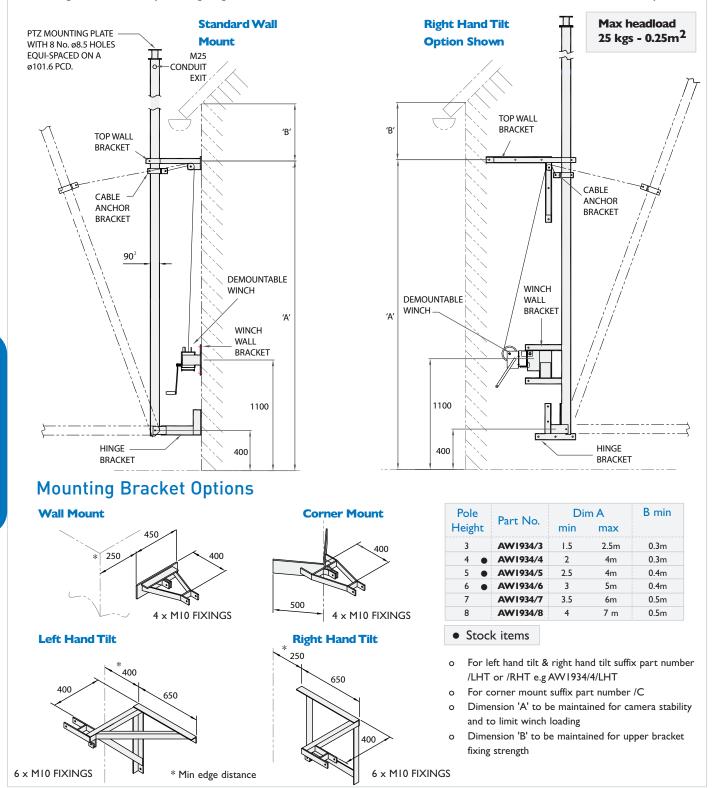
Features of Wall Mounted Tilt-Down Poles

Altron Tilt-down wall mounted poles offer a solution to virtually any location and head load where a tilt-down wall mounted pole is suitable, for gaining an elevated viewpoint from an existing structure. Bespoke mounting brackets can be provided to suit site specific requirements.

- o Comprehensive standard range to suit most applications
- o All Altron standard accessories available
- o Hot dip galvanised for longevity
- o Bespoke fixing brackets for non-standard situations

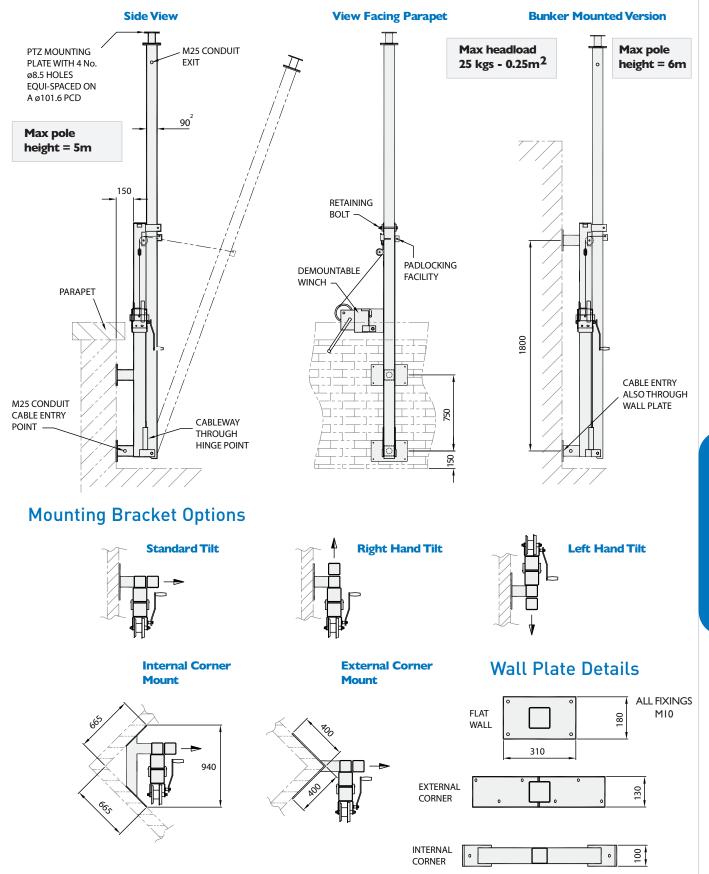
AW1934 Wall Mounted Tilt-Down Poles

For single or two storey walls, giving a cost effective solution. Demountable winches are included for added security.



AW1980 Parapet Mounted Tilt-Down Poles

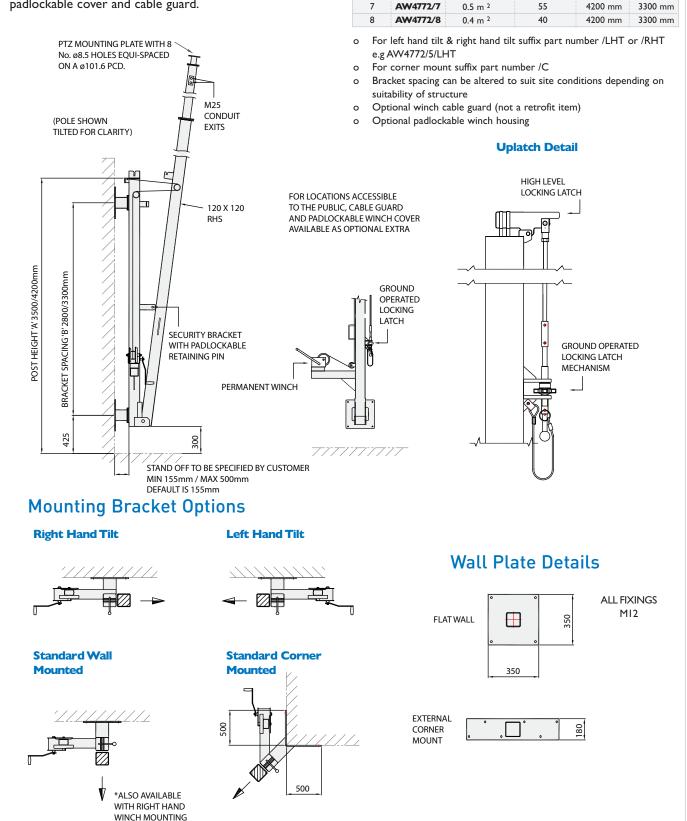
AW1980 parapet mounted tilt-down poles, give additional height from a standard parapet of suitable construction. Demountable winches and the facility to padlock make this product suitable for public areas, such as multi-storey car park roof levels. A roof 'bunker' mounted version is also available.



-> Tilt-Down Wall Mounted Poles

AW4772 High Loading Wall-Mounted Tilt-Down Pole

Typically for dual camera and lighting installations, this range can be operated safely without the need to access a high level locking bolt, utilising a high level latch operated from ground level. Winches are fixed and can be supplied with padlockable cover and cable guard.



Weight of

equipment

(kgs)

75

75

70

Post

height

'A'

3500 mm

3500 mm

4200 mm

Bracket

spacing

'B'

2800 mm

2800 mm

3300 mm

Wind surface

area of

equipment

0.75 m²

0.75 m²

0.65 m²

Total

(m)

Height

4

5

6

7

Part

No.

AW4772/4

AW4772/5

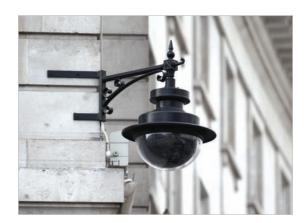
AW4772/6

Wall Mounted Brackets \leftarrow









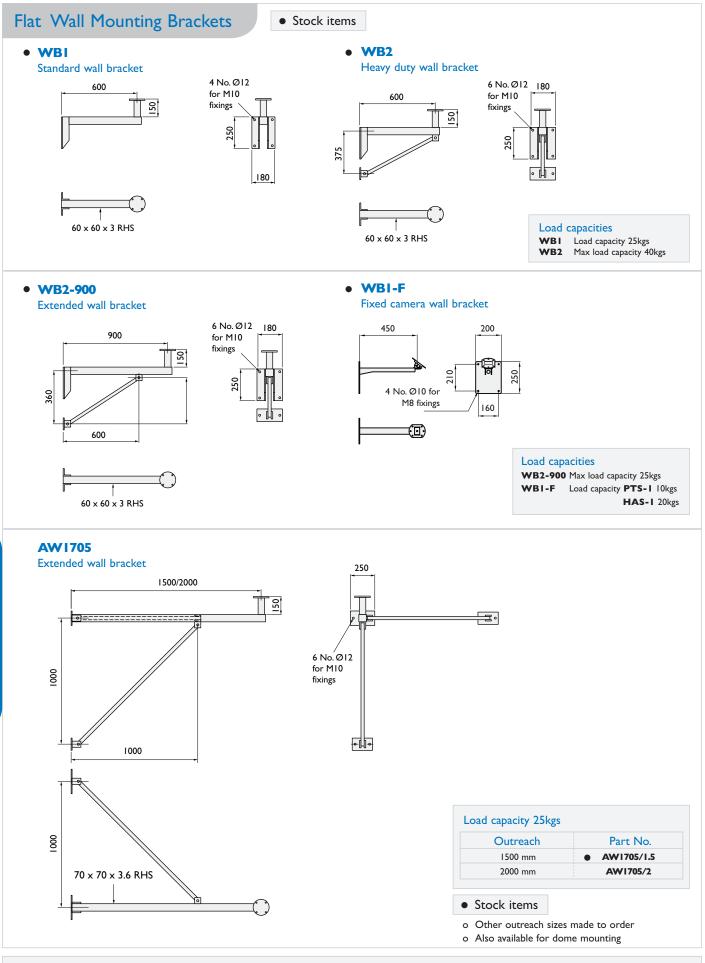






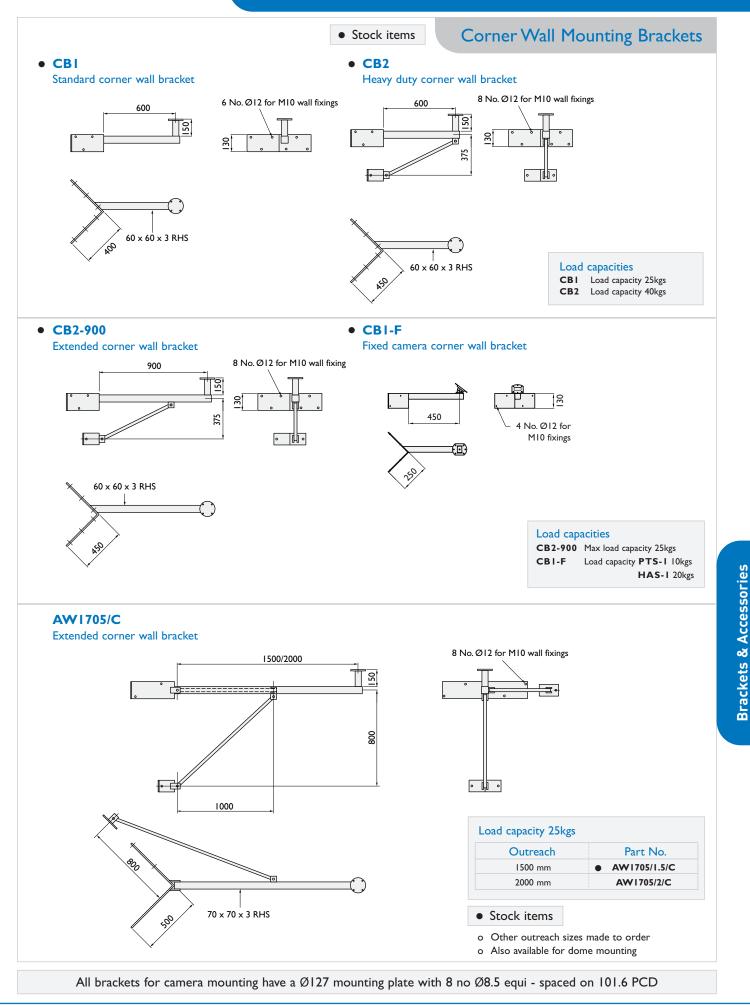
A comprehensive range of brackets to suit most common requirements, with a large amount of stock held. For installations where a standard bracket is not suitable, then we produce modified bracket designs and bespoke brackets on a fast turnaround.

\rightarrow Wall Mounted Brackets



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Wall Mounted Brackets \leftarrow



\rightarrow Wall Mounted Brackets

Wall & Corner Mounted Dome Brackets

The Altron range of wall brackets for mounting domes is versatile and can be produced to suit any dome type. Standard mounting variations suit most installations, but if you have an installation that requires something non-standard, then we produce bespoke brackets to suit your specific requirement.

We stock components to suit the following manufacturers domes.

- Bosch

IVC

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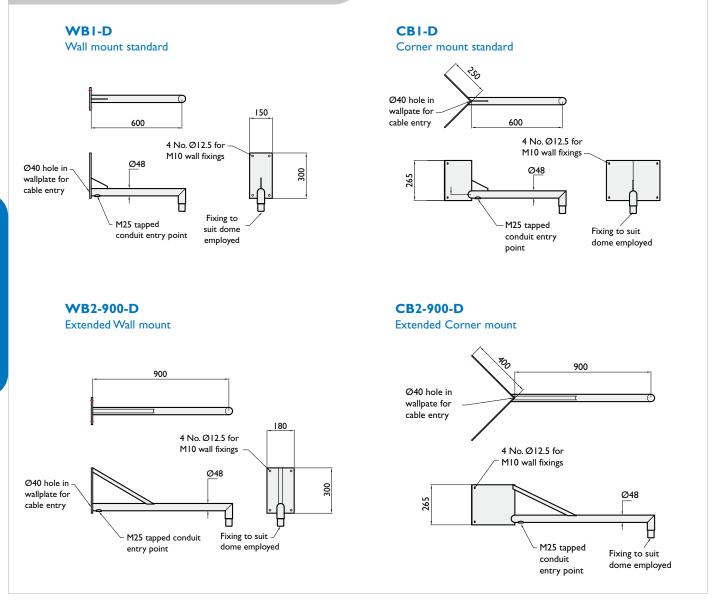
- Mic I
- Dedicated MicrosHoneywell

Mark Mercer

- Molynx/Bewator
- Panasonic
- Pelco
 - Philips
- Samsung TechwinSiemens
- Siemens
- Sony
- Tyco/ AD
- Ultrak
- Vicon
- Vista
 - Videotec

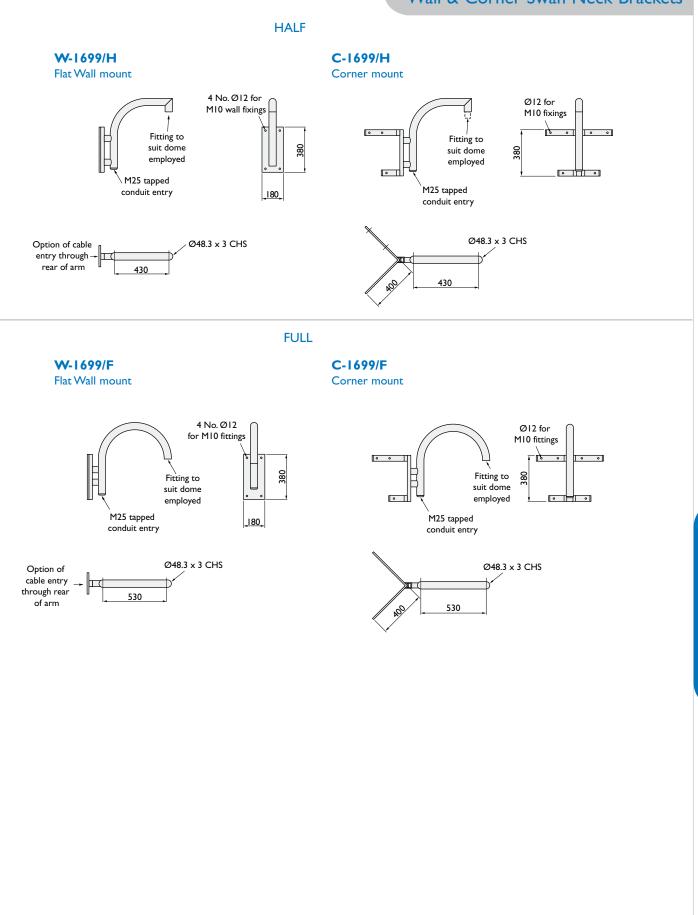
- o Please specify dome type when ordering
- o All other manufacturers dome fittings made to order

Wall & Corner Dome Mounting Brackets



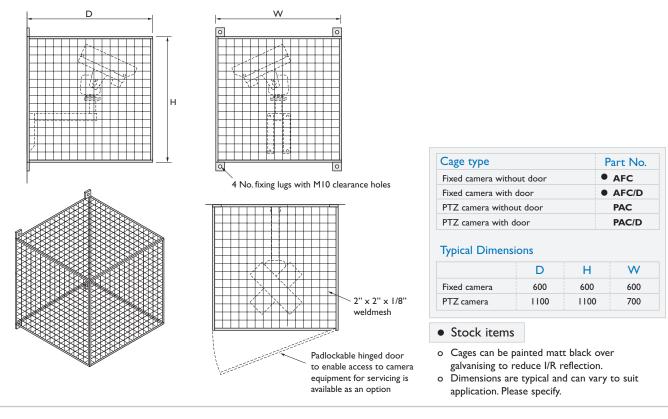
Wall Mounted Brackets \leftarrow

Wall & Corner Swan Neck Brackets



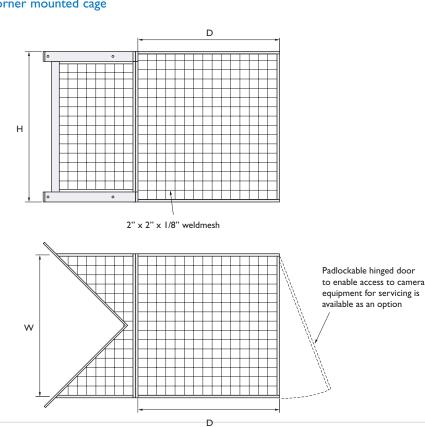
Wall Mounted Cages





Corner mounted cage

Brackets & Accessories



Cage type	Part No.
Fixed camera without door	C-AFC
Fixed camera with door	C-AFC/D
PTZ camera without door	C-PAC
PTZ camera with door	C-PAC/D

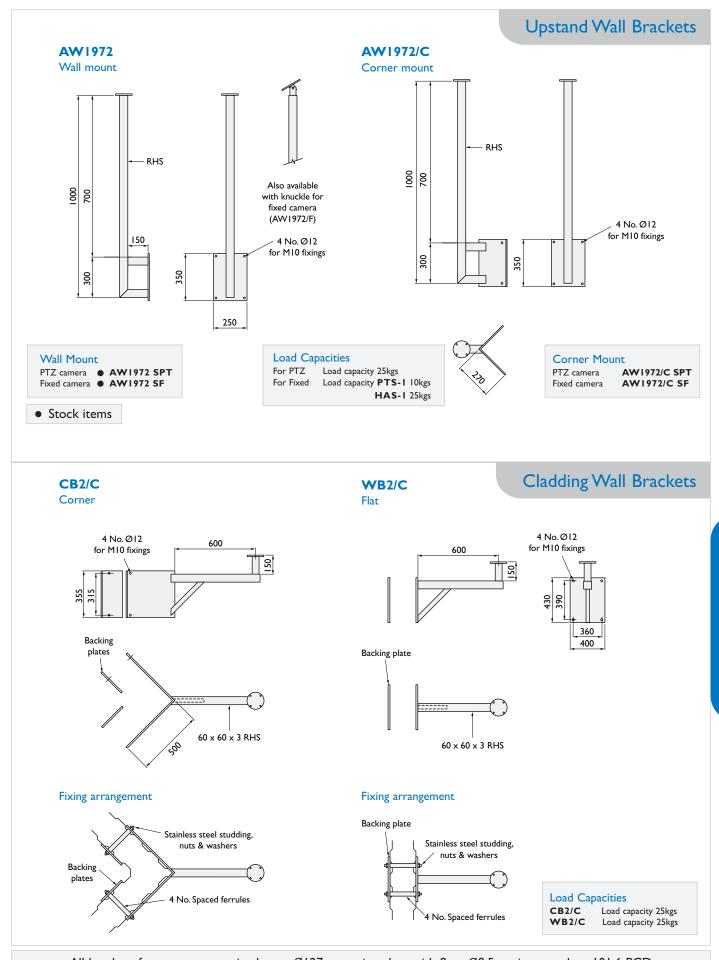
Typical Dimensions

	D	Н	W
Fixed camera	600	420	600
PTZ camera	650	500	1100

o Cages can be painted matt black over galvanising to reduce I/R reflection.

o Dimensions are typical and can vary to suit application. Please specify.

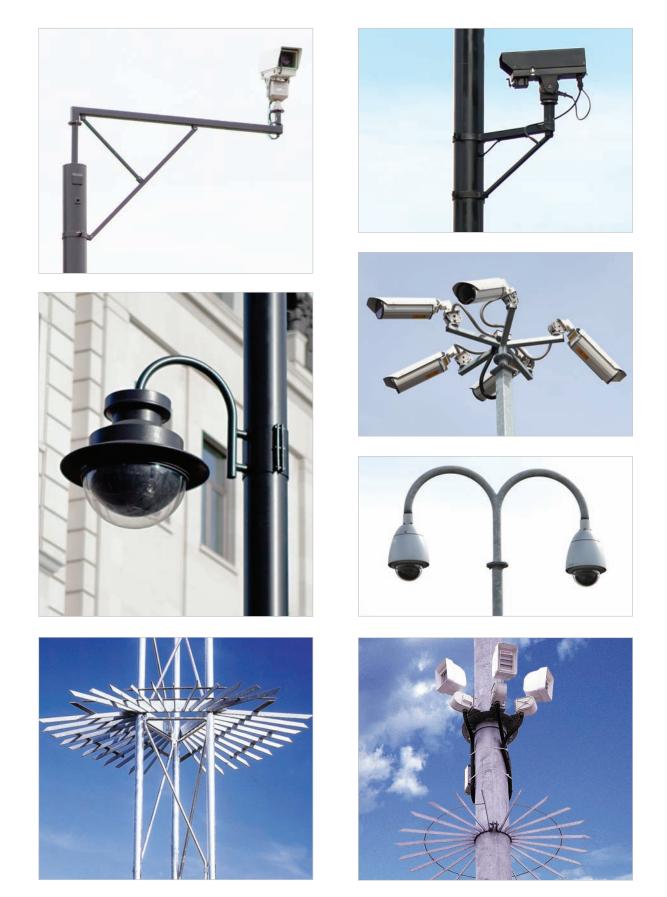
Wall Mounted Brackets \leftarrow



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Brackets & Accessories

\rightarrow Pole & Tower Accessories



All of our pole and tower ranges are backed up with a wide range of standard mounting accessories giving an appropriate and professional installation. Most items are held in stock and variations are available on a short lead time.

Pole & Tower Accessories \leftarrow

• Stock items

• PTS-I

- Standard fixed camera knuckle
- o Load rating 10Kgs
- o General duty adjustable knuckle for mounting fixed cameras robust & economic

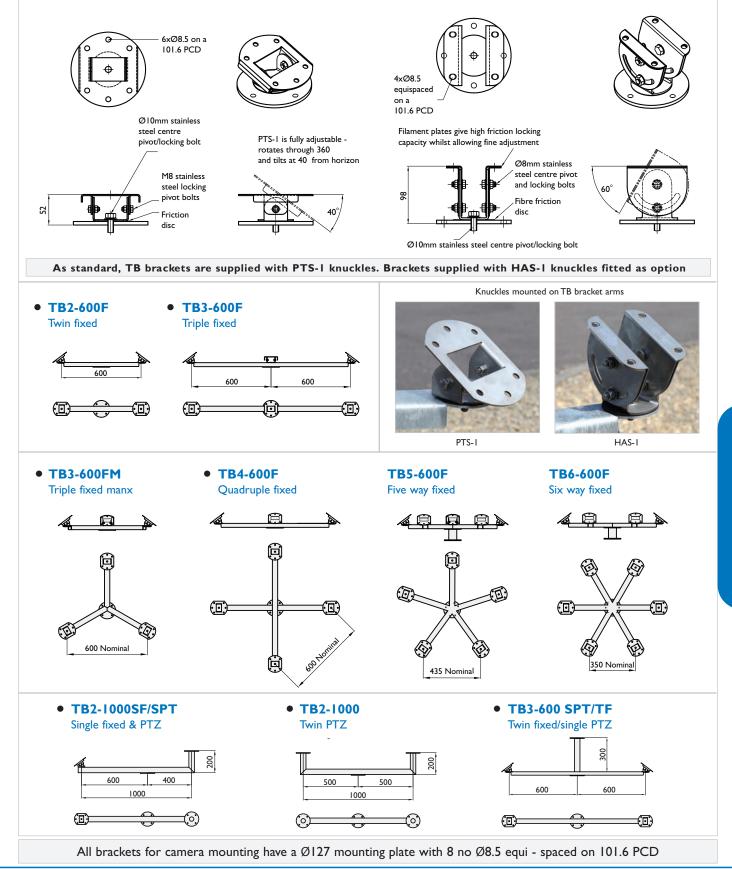
TB Brackets & Fixed Camera Knuckles

• HAS-I

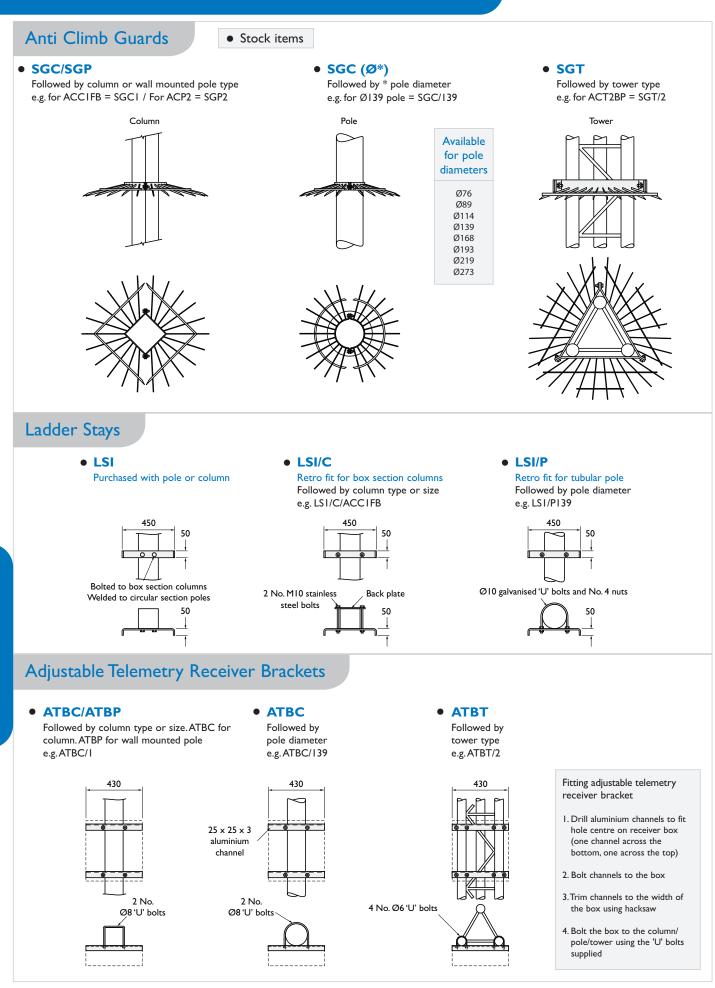
High specification fixed camera knuckle

o Load rating 25Kgs

O High specification adjustable knuckle where fine adjustment and a solid platform are required to ensure accurate reliable camera alignment

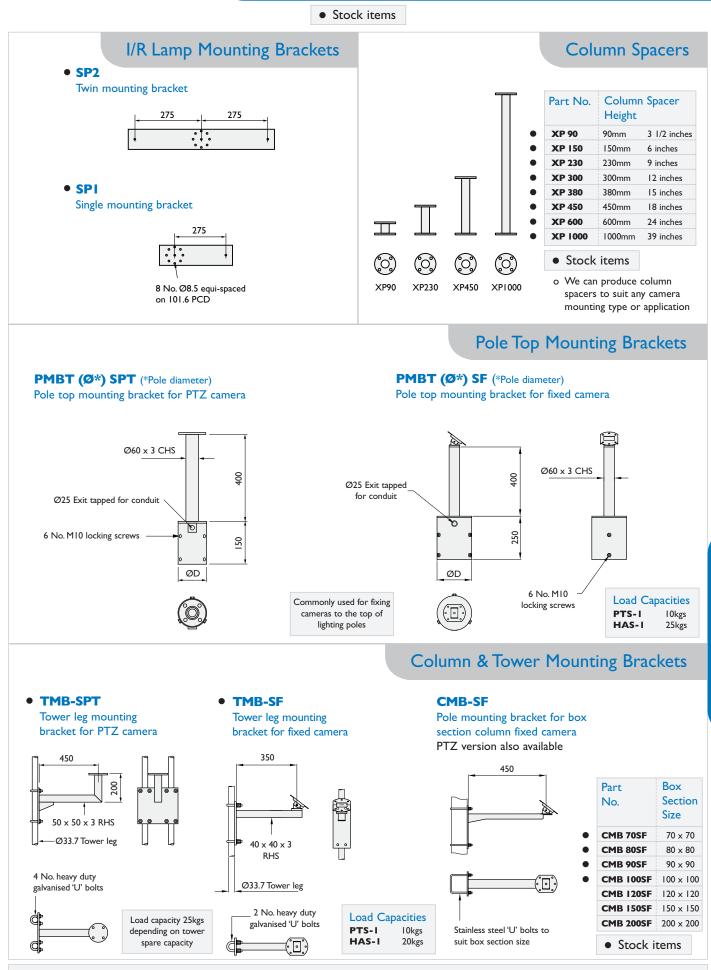


\rightarrow Pole & Tower Accessories



Brackets & Accessories

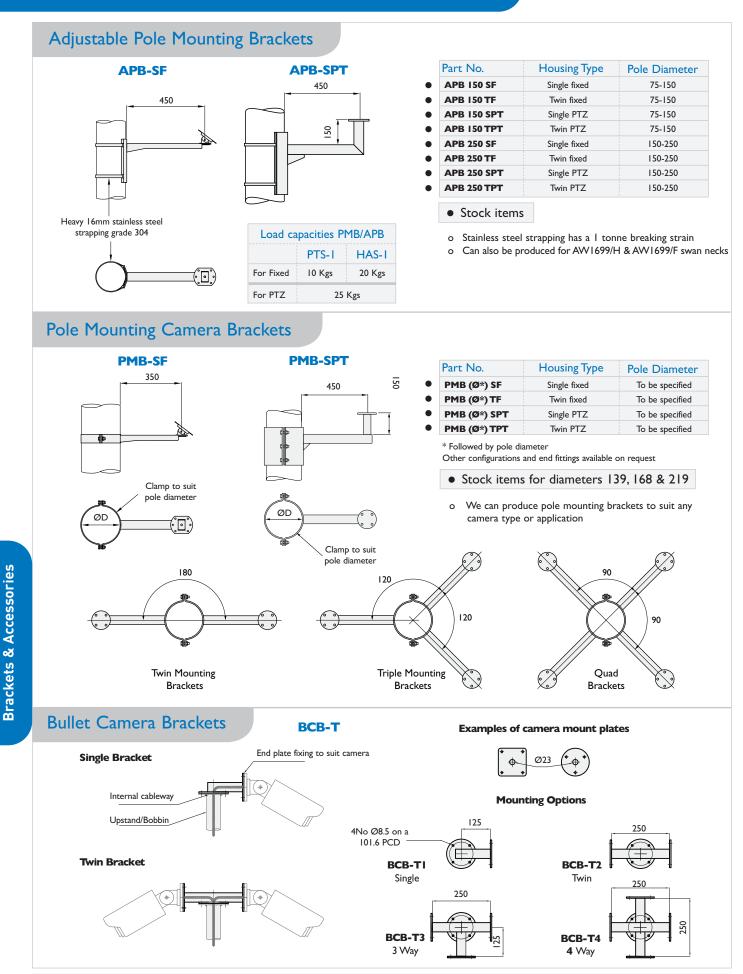
Pole & Tower Accessories \leftarrow



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

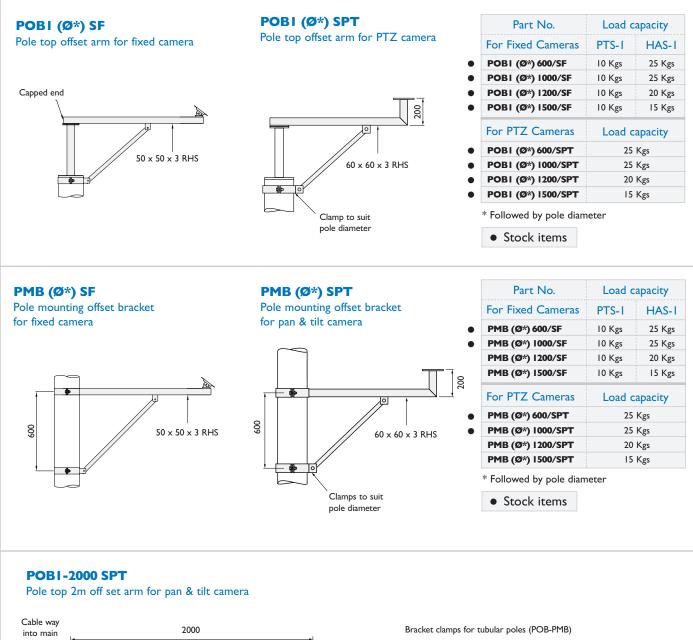
Brackets & Accessories

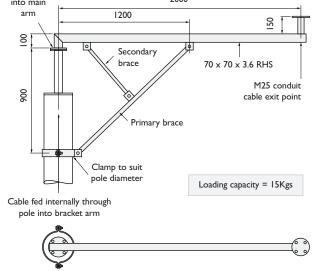
\rightarrow Pole & Tower Accessories



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Offset Side Arms Brackets for Tubular Poles & Box Section Columns







Bracket clamps for box section columns (COB-CMB)



All part numbers noted above are for brackets to fit tubular poles. For brackets to fit box section columns replace POM/PMB prefixes with COB/CMB. State column section size instead of pole diameter.

For extended offset brackets, it is important than on tilt down products, the arm is orientated in the direction of tilt. Please refer to P103 for full explanation.

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Swan Neck & Dome Mounting Brackets

The Altron range of swan necks & dome mounting brackets are versatile and can be produced to suit any dome type. Standard mounting variations suit most installations, but if you have an installation that requires something non-standard, then we produce bespoke brackets to suit your specific requirement.

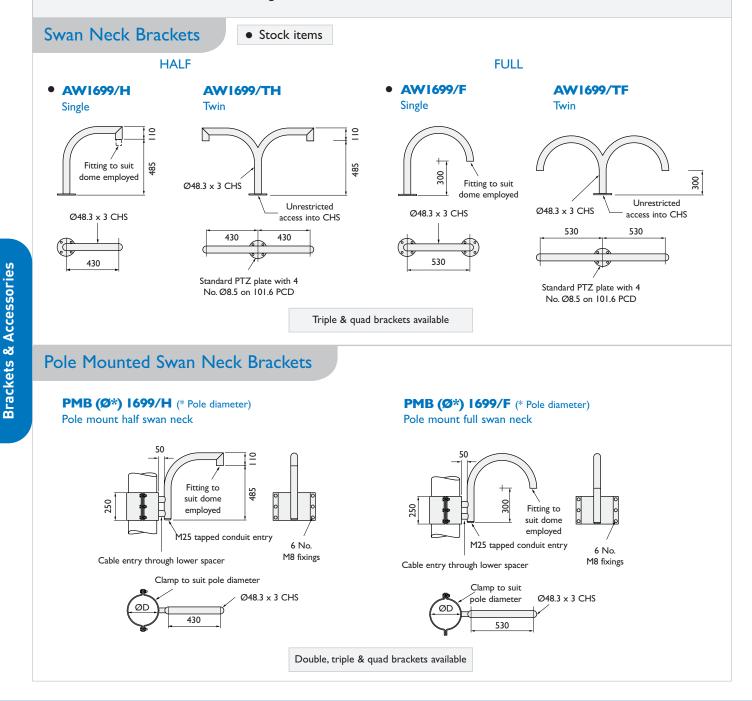
We stock components to suit the following manufacturers domes.

- Bosch
- Mic I
- Dedicated Micros
- Molynx/Bewator
- Honeywell JVC

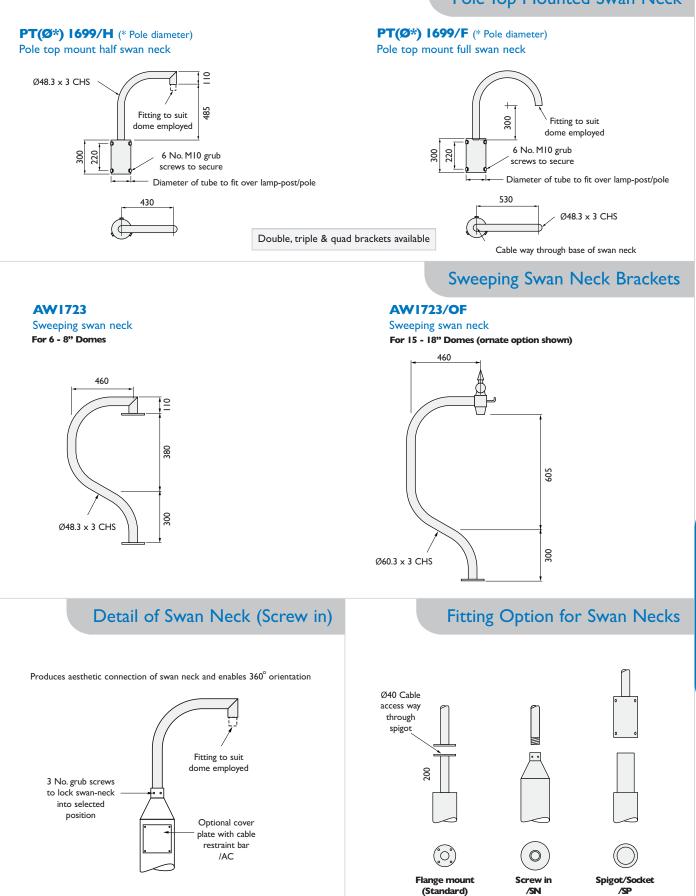
Mark Mercer

- Panasonic
- Pelco - Philips
- Samsung Techwin
- Siemens
- Sony - Tyco/ AD - Ultrak
- ViconVista
- Videotec

- o Please specify dome type when ordering
- o All other manufacturers dome fittings made to order





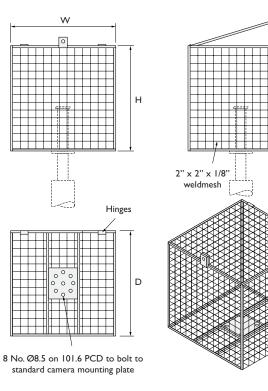


Brackets & Accessories

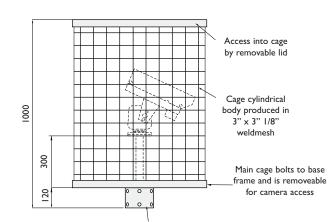
Due to our policy of continuous product improvement specifications may change without notice

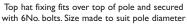
Pole Top Mounting Cages

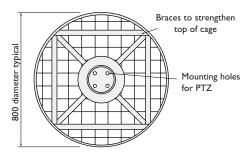
Pole top mounted cage



Cylindrical cage for pole top







Padlockable hinged door to enable access to camera equipment for servicing is available as an option

Cage type	Part No.
Fixed camera	AFCPT
PTZ camera	PACPT

Typical Dimensions

	D	Н	W
Fixed camera	500	500	500
PTZ camera	1000	1000	1000

o Cages can be painted matt black over galvanising to reduce I/R reflection.

o Dimensions are typical and can vary to suit application. Please specify.

Note Angle of frame removed from this front edge to allow unrestricted view for camera

Cage Ø	Part No.
500	PACPT/500
800	PACPT/800
1000	PACPT/1000
1200	PACPT/1200

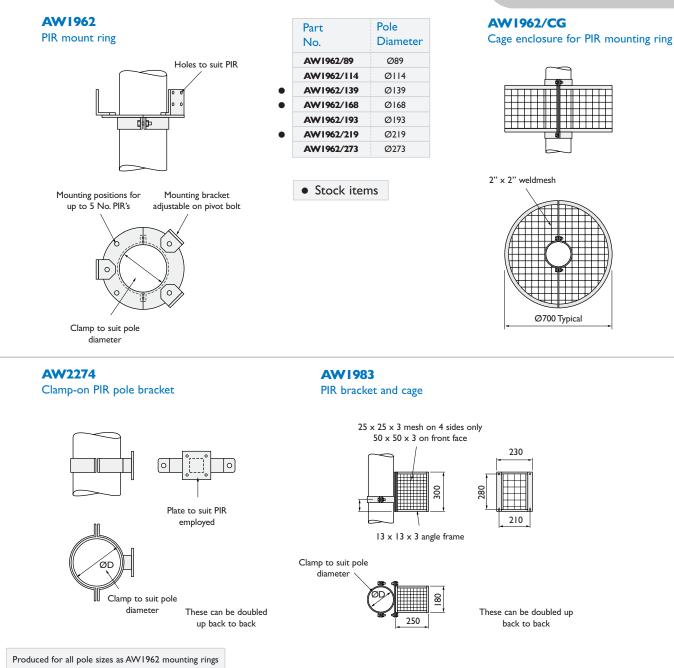
o Cages can be painted matt black over galvanising to reduce I/R reflection

o Diameter of cage to suit camera assembly housing

Brackets & Accessories

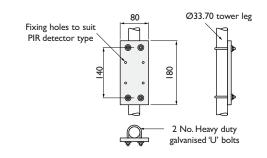
Pole & Tower Accessories \leftarrow





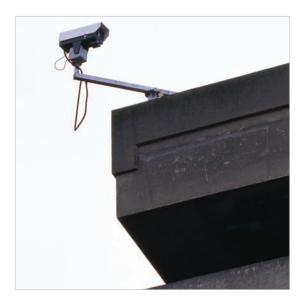
AW2275





\rightarrow Roof Mounted Brackets



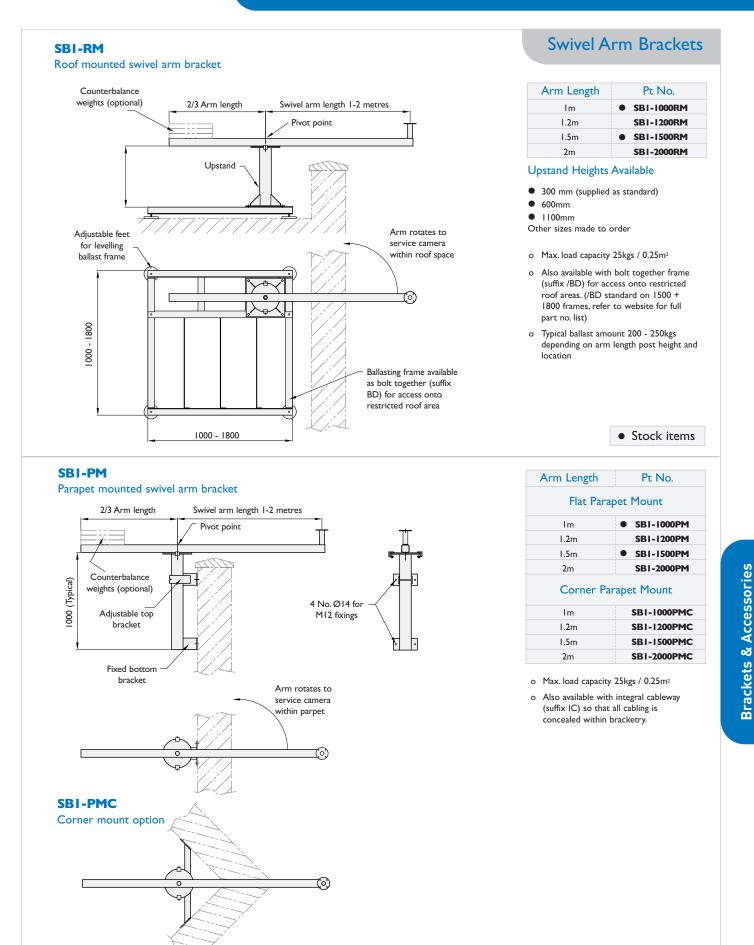






A common sight, protruding over parapets, our roof and parapet mounting brackets enable safe servicing of cameras within the roof space. Catering specifically for both PTZ and dome applications, most variations are available either from stock or on short lead times. For the many more unusual roof mounted installations, we provide a bespoke design service calling upon many years of experience, to overcome unusual mounting requests.

Roof Mounted Brackets ←



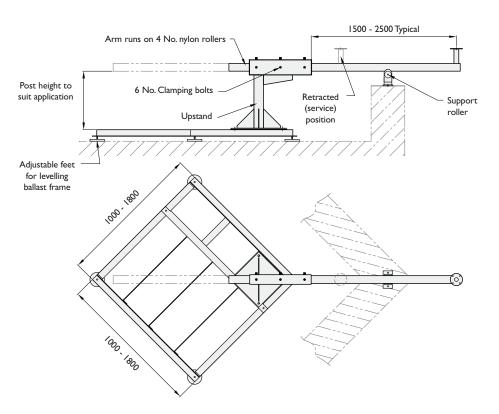
All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

\rightarrow Roof Mounted Brackets

Sliding Arm Brackets

SAI-RM

Roof mounted sliding arm bracket



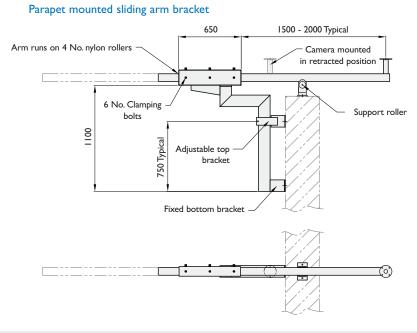
Arm Length	Pt No.
1.5m	SAI-1500RM
2m	SAI-2000RM
2.5m	SA1-2500RM

Upstand Heights Available

300 mm (supplied as standard) 600mm & 1100mm Other sizes made to order

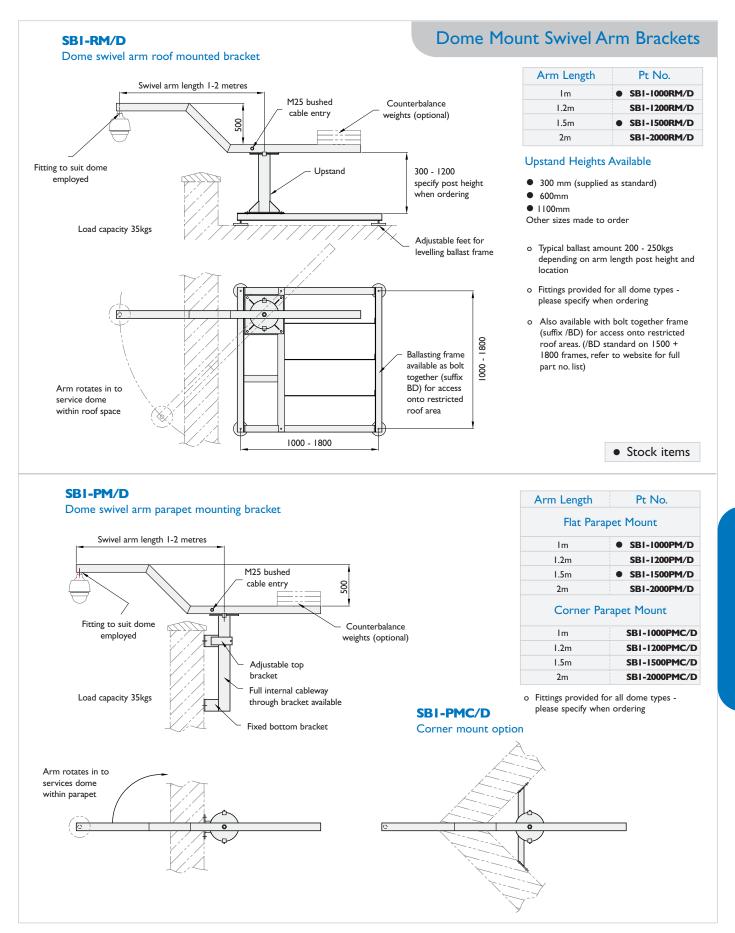
- o Max. load capacity 25kgs / 0.25m²
- o Available as flat mount as shown or corner mount
- Also available with bolt together frame (suffix /BD) for access onto restricted roof areas. (/BD standard on 1500 + 1800 frames, refer to website for full part no. list)
- o Typical ballast amount 200 250kgs depending on arm length post height and location

SAI-PM



Arm Length	Pt No.					
Flat Parapet Mount						
lm	SAI-1000PM					
1.5m	SAI-1500PM					
2m	2m SAI-2000PM					
Corner Par	sal-1000PMC					
1.5m SAI-1500PMC						
2m SAI-2000PMC						
 Available as flat more corner mount Max. load capacity 2 						

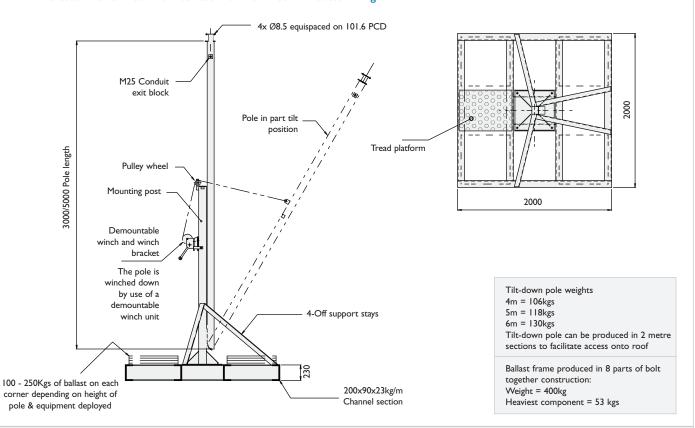
All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD



\rightarrow Roof Mounted Brackets

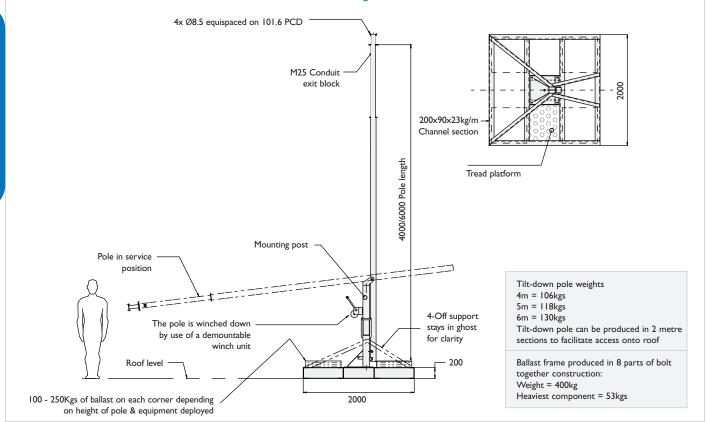


Ballasted frame - roof mounted 3/5m tilt-down-column bottom hinged

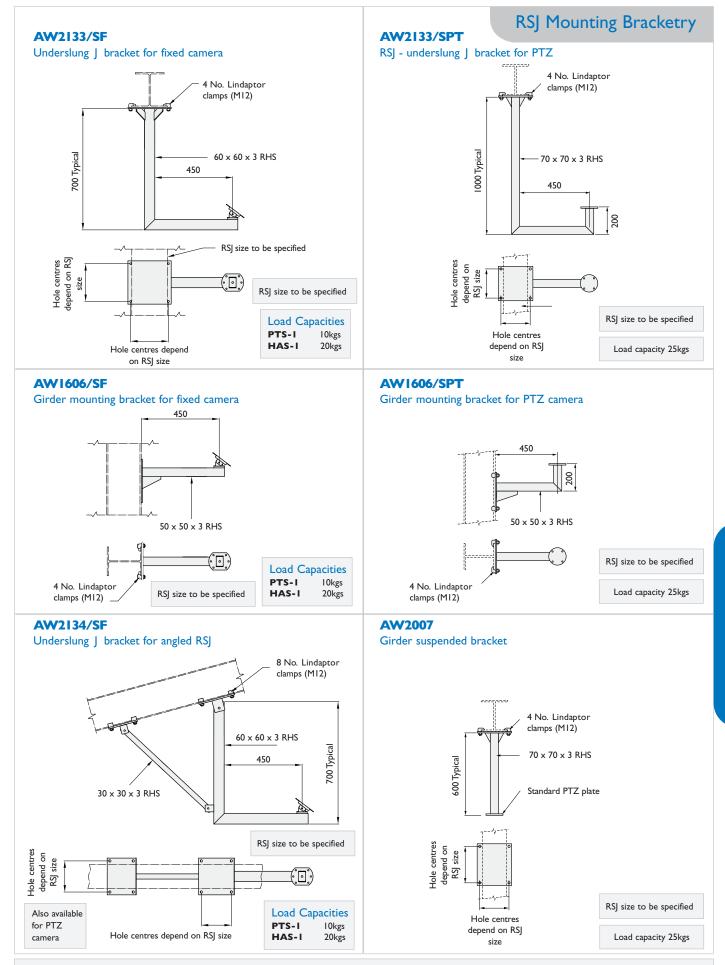


AW3288

Ballasted frame - roof mounted 4/6m tilt-down-column mid hinged



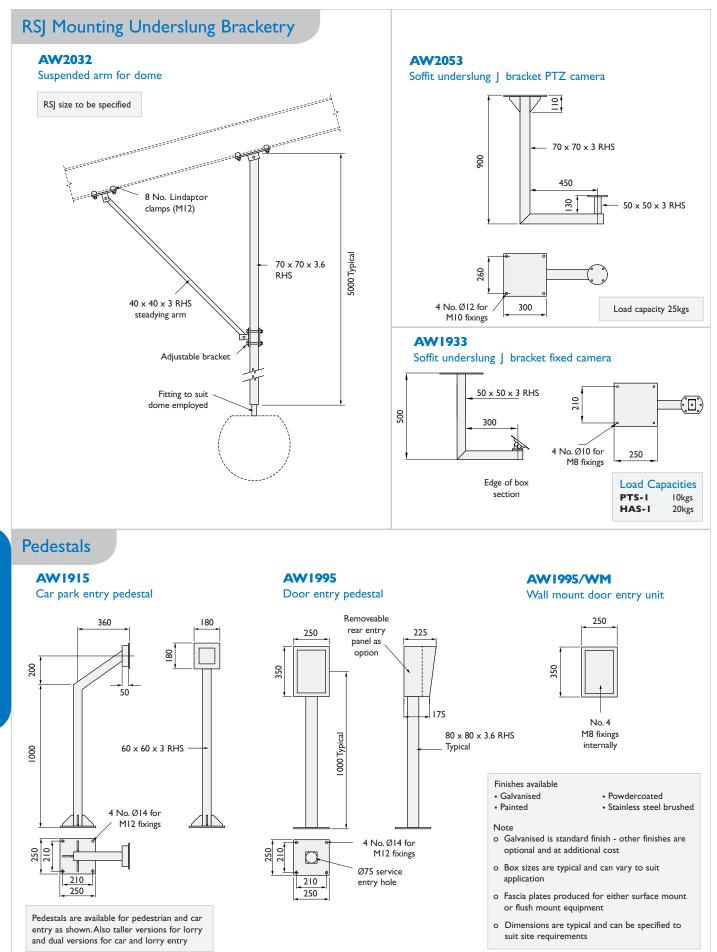
$Miscellaneous \leftarrow$



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

www.altron.co.uk 90

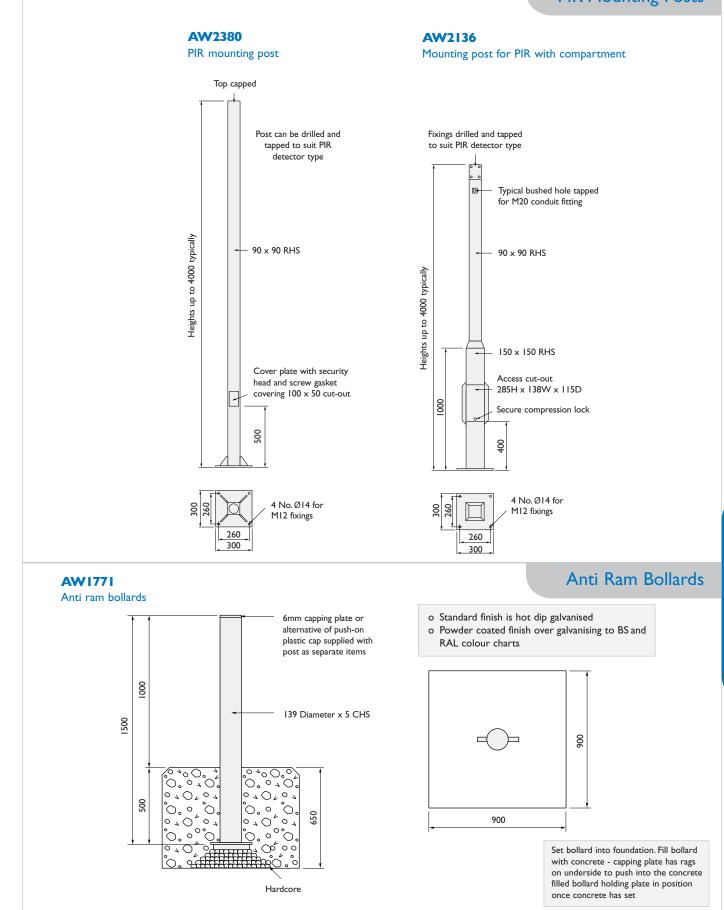
\rightarrow Miscellaneous



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

$Miscellaneous \leftarrow$





\rightarrow Special Bracket Design

As well as providing a wide range of standard brackets we have over the past 20 years built up a significant library of 'special' designs, to overcome the many varying and challenging requirements for mounting cameras in difficult and unusual locations.

Today we find that the many 'specials' are a variation of either a standard bracket or a modification to a previous design for a similar application, so they are straight forward for us to produce.

We also have many standard design features that can be brought together into a one bespoke off design. And where the requirement is completely specific, we offer a full design service.

The diagrams in this section illustrate how we have overcome various specific customers installation requirements. The photographs are just a small sample of the many thousands of specials we have produced.

Hampden Park lighting gantry bracket

Telescopic raise and lower bracket to enable camera servicing within lighting gantry.





In operational position



Brackets & Accessories



Top view



Waterloo bridge bracket

Retractable bracket using separate device to raise for servicing of camera





Case Study

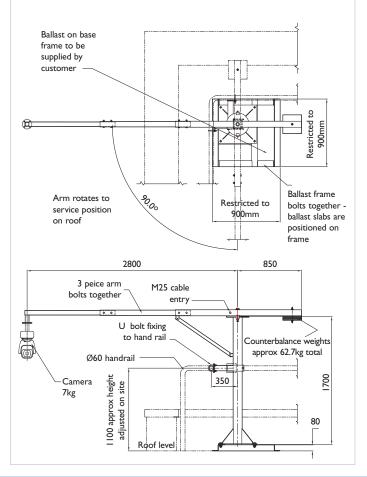
Ballast Swivel arm bracket

Scenario

The customer requirement was to have the dome extend out over the building edge by 1500mm. The bracket needed to be steadied by a handrail, but could not be structurally fixed to it, but also had a limited foot print for a ballast frame as this needed to fit inside a window cleaning gantry track. Arm could not protrude to the rear by more than Im for the same reason. As the bracket is on a high rise roof, all parts needed to be small enough to carry onto the roof by one person via a lift and access stairs.

Solution

The solution was a swivel arm bracket with an arm that breaks down into three parts and is bolted together, along with a bolt together frame, bolt on steadying arms and counterbalance weights for the rear of the arm.



Special Bracket Design \leftarrow

Case Study

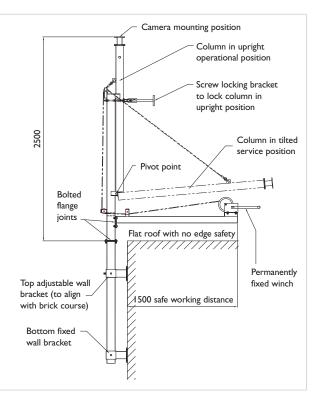
Roof edge mounted tilt down column

Scenario

The customer needed to mount a camera approx 2.5 metres high at an unprotected roof edge and be able to winch the camera in for servicing at a safe distance from the roof edge (1.5m).

Solution

The solution was a tilt down column, mounted to a wall mounted post and tilted down using a fixed winch on an extended arm. The column is locked in the vertical with a screw lock that can be operated at arm's length. The winch cable is routed around the bracket to enable the column to tilt down away from the edge of the roof towards the operator.



Stainless Steel Corner Bracket

Made to customer specification



Ornate Corner Mount Bracket

To match existing street furniture



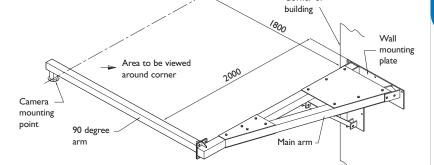
Corner of

Case Study

90 degree extended arm wall bracket

Scenario

Customer requirement was to view a fire escape door area being used as a shelter for drug abuse. The camera needed to be in a position where it could look at the door way, but be out of reach with the bracket fixing point, camera cables etc, not accessible from the fire escape.



Solution

The solution was for the bracket mounting points to be round the corner of the building, completely inaccessible and for the bracket to be installed using a cherry picker. The bracket has an arm at 90 degrees to reach around the corner and look at the fire escape and to stand off far enough to not be reached from the fire escape. The bracket needed to be made in three pieces - wall mounting plate, main arm and additional arm forming the 90 degree portion. The main arm needed to be sufficiently rigid to keep the movement of the 90 degree arm to a minimum.

\rightarrow Special Bracket Design

Case Study

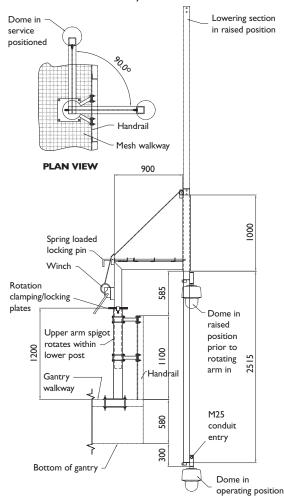
Gantry mounted telescopic, retractable, swivelling, dome mounting bracket

Scenario

Customer requirement was to have a dome mounted below a railway gantry to view along marshalling tracks and then to be able to bring the dome up onto the gantry walkway for servicing. The operation needed to take place within the gantry handrail with no overreaching.

Solution

The solution was a pole section that is lowered using a winch through an extended arm which swivels to enable the dome to be brought into the gantry walkway. The swivel arm is locked in the outward 'operating' position and can be padlocked there. The lowering pole is not held on the winch rope when lowered, but by a locking pin, that is spring loaded and operated from within the gantry. The bracket is fixed to the gantry floor and handrails for stability.



Parapet Mounted Counter-Balance Bracket

Mounts to top of parapet only and tilts by hand onto roof



Cantilever Arm Tower

Cameras oriented downwards to observe vehicles



Wall Mounted Pole

No stand-off to customer specification



Ornate Pole Top Bracket

To customer specification in keeping with other street furniture



Cabinets \leftarrow



Our standard range of cabinets are of robust and secure design. They are not intended to compete with light duty pressed steel cabinets. Material used in the body is steel plate, which is between 4-6mm thick depending on cabinet size. All cabinets are fully fabricated and then hot dip galvanised after fabrication. The finish is powder coated, and the minimum expected life span is 25 years.

As well as being very resistant to physical attack, they have key security features, to resist vandal attacks and attempts to force entry.

A full range of accessories and options are available.

→ AEC Equipment Cabinet Range

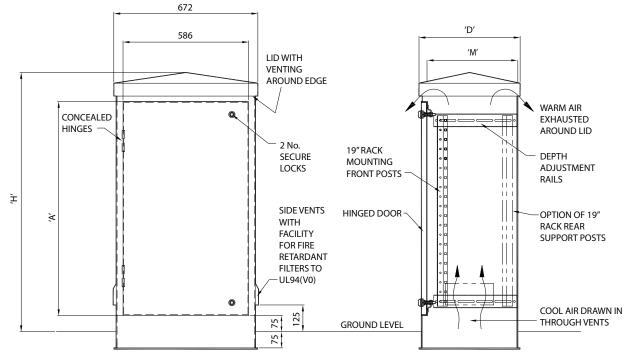


AEC Cabinet Range Features

- o For use with 19" rack mounted equipment
- o Hinged door with internal hinges

o

- o Heavy duty fabricated construction
- o Hot dip galvanised finished gives minimum expected 25 year lifespan
 - Numerous security features ensure high level of vandal resistance
- o Earthing points within cabinet and on door
- o Convection air circulation and venting as standard
- o Additional back board can also be provided
- o Swing frame option available on some models
- o Standard colours are 14C39 Holly bush green or Black. Other colours from BS/RAL colour charts available on request
- o For security features see p99



Model No.	Height H	Depth D	Maximum Mounting Depth M	Door Aperture A x 516	Mounting Post Height	Cabinet Weight Kgs
AEC-90-65-45	900	450	400	650 x 516	15u	120
AEC-90-65-65	900	650	600	650 x 516	15u	132
AEC-11-65-45	1100	450	400	850 x 516	20u	140
AEC-11-65-65	1100	650	600	850 x 516	20u	154
AEC-13-65-45	1300	450	400	1050 x 516	25u	161
AEC-13-65-65	1300	650	600	1050 x 516	25u	177
AEC-16-65-45	1600	450	400	1250 x 516	30u	180
AEC-16-65-65	1600	650	600	1250 x 516	30u	200

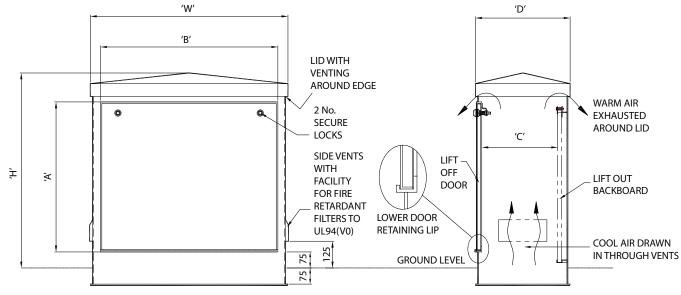
Options	PT No.
Tamper Switch	/TS
4 point locking	/A4P
High Security lock in addition	/HS
Filter for vents	/F
Circulation Fan with filter for vents	/CF
Thermostat	/ T
Heater	/H
Swing frame (cabinet width increases)	/SF
Padlockable Hasp and Staple	/PHS
Backboard - Removable	/BB
Rear Struts	/RS

ARC Roadside Cabinet Range \leftarrow



ARC Cabinet Range Features

- Complete with quick release removable 15 mm thick treated backboard for equipment mounting
- o Lift off door
- o Heavy duty fabricated construction
- o Hot dip galvanised finished gives minimum expected 25 year lifespan
- o Numerous security features ensure high level of vandal resistance
- o Earthing points within cabinet and on door
- o Convection air circulation and venting as standard
- o Standard colours are 14C39 Holly bush green or Black. Other colours from BS/RAL colour charts available on request
- o For security features see p99



Model No.	Height H	Width W	Depth D	Working Depth C	Back Board Height x Width	Door Aperture A x B	Cabinet Weight Kgs
ARC-90-60-3	2 900	600	320	220	700 x 470	650 x 475	90
ARC-90-90-3	2 900	900	320	220	700 x 770	650 x 775	122
ARC-90-12-3	2 900	1200	320	220	700 × 1070	650 x 1075	154
ARC-12-60-3	2 1200	600	320	220	1000 x 470	950 x 475	113
ARC-12-90-3	2 1200	900	320	220	1000 x 770	950 x 775	145
ARC-12-12-3	2 1200	1200	320	220	1000 x 1070	950 x 1075	177
ARC-90-60-4	2 900	600	420	320	700 x 470	650 x 475	97
ARC-90-90-4	2 900	900	420	320	700 x 770	650 x 775	132
ARC-90-12-4	2 900	1200	420	320	700 x 1070	650 x 1075	167
ARC-12-60-4	2 1200	600	420	320	1000 x 470	950 x 475	121
ARC-12-90-4	2 1200	900	420	320	1000 x 770	950 x 775	153
ARC-12-12-4	2 1200	1200	420	320	1000 x 1070	950 x 1075	185

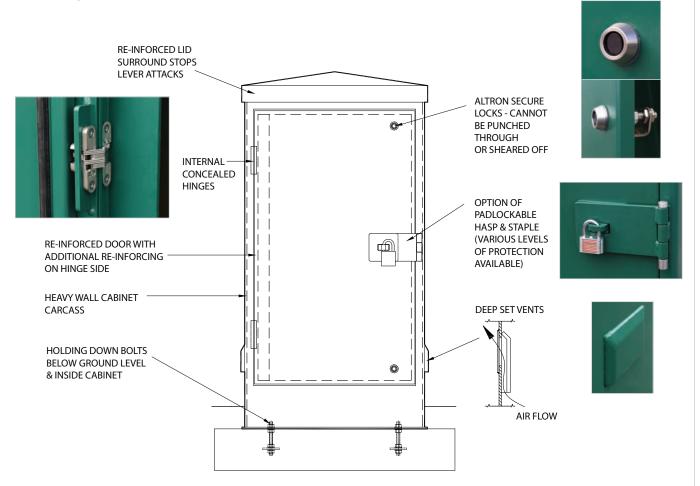
Options	PT No.
Tamper Switch	/TS
4 point locking	/A4P
High Security lock in addition	/HS
Filter for vents	/F
Circulation Fan with filter for vents	/CF
	/CF /T
for vents	

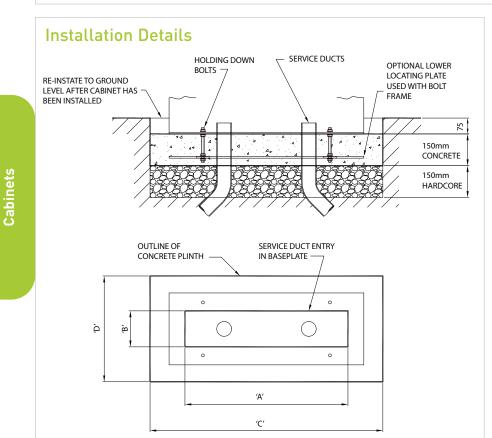
All dimensions in mm

Cabinets

\rightarrow Cabinet Features







Base Entry Details

Part number	Base plate aperture for duct entry A x B	plinth footprint
ARC- * - 60 - 32	470 x 170	800 × 500
ARC- * - 90 - 32	770 x 170	1100 x 500
ARC- * - 12 - 32	1070 x 170	1400 × 500
ARC- * - 60 - 42	470 x 270	800 × 600
ARC- * - 90 - 42	770 x 270	1100 × 600
ARC- * - 12 - 42	1070 x 270	1400 × 600
AEC- * - 65 - 45	520 x 270	880 x 650
AEC- * - 65 - 65	520 x 370	880 × 850

* All height variations

o Cabinet supplied complete with template and holding down bolts

o Bolt frame is available as an extra item

Winches ←

BRAKING MECHANISM WITHIN WINCH CASING

DOUBLE RACHET



ROBUST WINCH HOUSING WITH HEAVY ZINC PLATED FINISH

LARGE CABLE DRUM

CABLE DRUM GEAR GUARD

Winches

Altron auto-braking winch kits have been proven in the field for over 25 years and have the following safety features

- 1. Auto-braking mechanism comprises a friction clutch. When the winch cable is wound in (raising the tower, column or pole), a conventional ratchet is used. When the cable is wound out (lowering the tower, column or pole), a friction clutch is engaged. The greater the load, the greater the clutches holding capacity. If the handle is released, the load is held on the clutch and is fail safe.
- 2. Winch-drum guard. On DW1000 and DW1500 winches a guard is fitted as standard. This reduces the possibility of anything getting trapped in the gears of the winch during operation such as loose clothing, etc. and also reduces the possibility of the drum gears getting damaged.
- 3. Large diameter drum core. Reduces flattening and kinking of winch cable, extending the usable life of the cable.
- 4. Gearing ratio. The gearing ratio used on all winches stops the winch being overloaded by manual winding of the winch handle. A specific design feature, when the winch is used correctly, the pressure on the winch handle required to overload the winch is greater than can be applied by hand. Therefore under normal conditions when the winch is used in accordance with our operating instructions and with camera equipment within maximum rated, winches cannot be overloaded.

Notes on Altron Winch Kits

Altron winch kits are designed to be as simple and safe as possible to use, but as with all mechanical equipment, require correct operation and regular maintenance to ensure safe and reliable on-going use.

Prior to raising or lowering any Altron tilt-down products, the operator should have thoroughly read the operating instructions supplied and should be familiar with the winch operating procedures and the possible risks involved.

Instructions are always available by contacting Altron and regular training courses are run at our offices.

Under LOLER (The Lifting Operations and Lifting Equipment Regulations 1998), it is the winch owner's responsibility to arrange an annual inspection of the winch to ensure that it is kept in a serviceable condition. Details of these requirements can be obtained from Altron.

Winch Mounting Options

Altron winches are mounted in the optimum position on all products, so that only balanced loads are applied to the product and winch mechanism. This gives an increased life span for the winch and pulleys and reduces maintenance due to wear.

To achieve this, winch bracket and handle combinations vary between product types. Each winch unit has a part number and serial number and it is imperative that the correct winch unit is used on each product. Winch part numbers are noted against all products in this catalogue.

The photographs below show the three sizes of winch that we



DW1000 Winch mounted on ACC2BPLA column. This bracket type for ACC/ACT columns and towers.



DW1500 Winch mounted on AW1545/TD pole. This bracket type for tubular poles.

Due to our policy of continuous product improvement specifications may change without notice



DW2500 Winch mounted on ANCT tower. This bracket type for ANCT towers only.

Foundations & Wind loading

Further information on foundations and wind loading for Altron products can be found on the following pages. This contains useful information which may help when assessing and planning projects using Altron CCTV products.

Foundation sizes for elevated sites and Area D

The table below shows foundation sizes for area D installations and, for exposed, elevated locations, higher than 100-150m above sea level. For areas A,B and C the left hand column shows the foundation size shown in the product foundation page - read across the table for the relevant foundation size to be used for the relevant location.

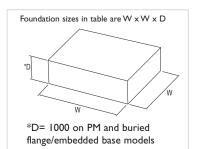
e.g. in the foundations table on p21 an ACC2/BPLA for country location in area B has a foundations size of $1.2 \times 1.2 \times 0.6$ but the location is at 300m ASL. Look for the foundation size in the left hand column of the table below and read across the row to the 'Elevated foundation' column for the correct foundation size, for the elevated location.

- For locations above 350m above sea level (ASL) and area D locations above 250m ASL, please contact Altron who will advise on product suitability and foundation sizes.
- Products marked with an asterisk in their foundation page are note suitable for installations in Area D or in area C above 200m. Please select an alternative product.

Foundation size Shown in product Foundations table Area A&B 0-100m Area C 0-150m	Area D foundation size to be used (0-250m ASL) instead of area C foundation	Area A&B foundation sizes for elevated sites 100-200m ASL	Area A&B foundation sizes for elevated sites 200-350m ASL	Area C foundation sizes for elevated sites 150-350m ASL
0.8 x 0.8 x 0.4	0.9 x 09 x 0.5	0.9 x 09 x 0.5	$1.0 \times 1.0 \times 0.5$	0.9 × 09 × 0.5
0.9 x 0.9 x 0.5	$1.0 \times 1.0 \times 0.5$	$1.0 \times 1.0 \times 0.5$	1.1 x 1.1 x 0.55	$1.0 \times 1.0 \times 0.5$
1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55
1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6
1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.3 x 1.3 x 0.65
1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.4 x 1.4 x 0.7
1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.5 x 1.5 x 0.75
1.4 x 1.4 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.5 x 1.5 x 0.75
1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.6 x 1.6 x 0.8
1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.7 x 1.7 x 0.9
1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	1.8 x 1.8 x 0.9
1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	1.9 x 1.9 x 1.0	$2.0 \times 2.0 \times 1.0$	1.9 x 1.9 x 1.0
1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	$2.0 \times 2.0 \times 1.0$	2.1 x 2.1 x 1.1	2.0 x 2.0 x 1.0
2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.1 x 2.1 x 1.1
2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.2 x 2.2 x 1.1
2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.3 x 2.3 x 1.2	2.4 x 2.4 x 1.2	2.3 x 2.3 x 1.2
2.3 x 2.3 x 1.2	2.4 x 2.4 x 1.2	2.4 x 2.4 x 1.2	2.5 x 2.5 x 1.2	2.4 × 2.4 × 1.2

Notes on foundations

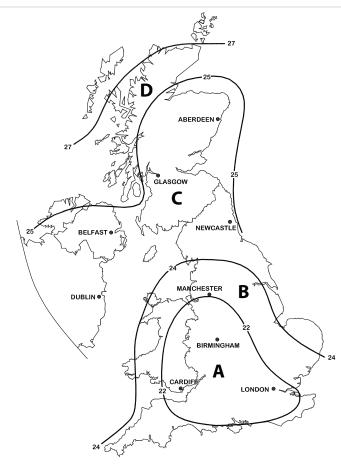
- o Grade C35 concrete to be used
- Allow a minimum of 72 hours for concrete to cure before placing pole/column/tower.
- o A minimum ground bearing capacity of 75 kN/m^2 is assumed
- Foundations comply with BS8004 and with the 'Institutes of Lighting Engineers Technical Report Number 7' (ILE TR7).
- Foundation sizes are based on foundations being founded on natural ground. For made up ground, further assessment on ground suitability may be required.
- Foundation sizes shown are suitable for maximum equipment load and wind surface area as shown in product technical tables. For greater loads, foundations sizes will need to be increased, please contact us and we will advise on product suitability for greater loads and foundation requirements.
- Foundation sizes shown are not suitable for installations that include PV/ solar panels or small wind turbines. For this type of installation please contact our Sales office.



ASL = Above Sea Level

Factors that effect foundation sizes & installations wind surface area

The main factor that determines foundation size (other than the location of the installation), is the wind surface area of the equipment being mounted on the pole/ tower/ column. It is the wind surface area that produces the wind force (kgf) that transfers itself to the foundation, for which the foundation needs to be of sufficient size to overcome the 'over turning moment' produced by this lever force. The greater the surface area of equipment at the top of the structure, the larger the foundation size required, so it is very important that the 'Max equip surface area' shown in our technical tables is not exceeded. An extreme example of this is a solar panel which can be very light - only a few kilograms, but can have a large surface area and therefore require a much larger foundation size than the ones we state.



UK wind speed map

The UK map shows Basic Mean Hourly windspeeds with the contour lines defining areas A,B,C and D. Windspeeds are shown at sea level and for every 100m increase in altitude, the Basic Mean Hourly windspeed increases by 10%, then giving the Site Mean Windspeed.

This Map is represented in BS EN 8100, design standard for lattice towers and is also used for wind loading requirements for ILE TR7 (which refers to BS 6399 and this map in Fig. 6). Therefore the wind loading data used in the design of our foundations fully complies with the design standards we use for our CCTV lattice towers (BS EN 8100) and our tubular poles and columns (ILE TR7).

Definition of 'Town location' - Town locations are locations within built up areas, with at least 15% of the surface built on, and/or on which the average height of buildings exceed 15m - for locations on outskirts that do not comply with this, 'Country location' for foundation sizes should be used.

Definition of 'Country location' - All areas, both coastal, up to 100m ASL and inland up to 200m ASL, that are not 'Town locations' (see table for higher altitudes).

STANDARD			AREA A & B FOUNDATIONS UPTO 200m ASL			AREA AB & C FOUNDATIONS UPTO 350m ASL				
Area	Max Basic Mean Hourly Windspeed	Height above sea level for foundation design	Site mean wind speed	Actual wind velocity	Height above sea level for foundation design	Site mean wind speed	Actual wind velocity	Height above sea level for foundation design	Site mean wind speed	Actual wind velocity
А	22 m/s	100m	24.2 m/s	41.8 m/s (93 mph)	200m	26.4 m/s	45.6 m/s (102 mph)	350m	29.7 m/s	51.4 m/s (115 mph)
В	24 m/s	100m	26.4 m/s	45.6 m/s (102 mph)	200m	28.8 m/s	50 m/s (111 mph)	350m	32.4 m/s	56 m/s (125 mph)
С	25 m/s	I 50m	28.8 m/s	50 m/s (111 mph)	N/A	N/A	N/A	350m	33.75 m/s	58.3 m/s (130 mph)
D	27 m/s	250m	33.75 m/s	58.3 m/s (130 mph)	N/A	N/A	N/A	N/A	N/A	N/A

International windspeed conversions

Our standard designs are based on a mean hourly wind speed of 28.8 m/s (metres per second). This table shows the conversion from this mean hourly wind speed, to other internationally recognised wind speed measurements. Conversions are taken from the International Code Council 'International Building Code'.

Mean Hourly	3 Sec Gust	10 Min Average	Fastest Mile
28.8 m/s	43.6 m/s	30.1 m/s	34.9 m/s
64.4 mph	97.5 mph	67.3 mph	78 mph
104.4 kph	158 kph	109 kph	126 kph

The actual wind velocity for a 28.8 m/s mean hourly wind speed = 50 m/s, 111 mph, 180 kph.

Specific site location foundation sizes

We can specify a more accurate foundation size for specific site locations. Foundations sizes shown in product tables are for the max allowable head load and for the highest windspeed for the Area A,B,C or D (for instance, the centre of London has a mean wind speed of 22.05 m/s rather than the 24.2 m/s we use for area A in general). Given a specific site location and maximum equipment load that will be employed, we can provide an ideal foundation size that will be the minimum required for the site. This can save on civils costs and also help when there are site restrictions for foundation size.

Foundation design service

For all products, we can provide specific foundation designs, for site conditions that do not comply with our standard designs. We are happy to provide guidance and pricing on request.

Equipment weight

The actual weight of the camera equipment does not significantly affect the foundation size, so for fixed, non-tilting products weight is not an issue. The weight of equipment is only relevant for tilt-down products, where the camera equipment weight needs to be lowered using the winch and winch cable. Weight then is then very important on tilt-down products, so as not to overload the winch and cable mechanism, so for tilt-down products the stated 'max equip weight' should not be exceeded.

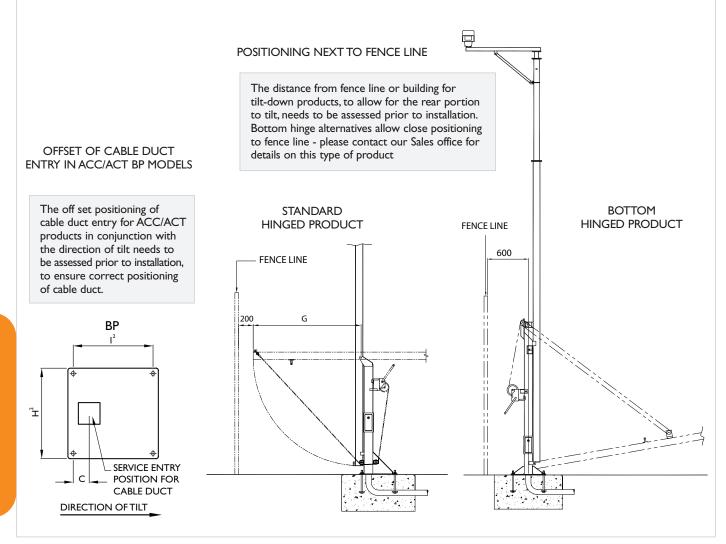
Off-set loads

Off-set loads on fixed poles/ towers/ columns, typically produced by using one of our PMB or POB mounting brackets, are not a significant, other than the fact that an off-set load increases the deflection of the structure and the movement of the camera monitor image. Offset loads will also increase the stress on the structure, so even though most Altron poles, towers and columns have plenty of capacity for increased stress, some do not, so it is important to consult with us when anything more than a relatively small offset (600mm) is being used. Towers do not like to be twisted, so a pole is much better for an offset load then a tower, but a larger diameter pole will be needed to keep deflection to a minimum.

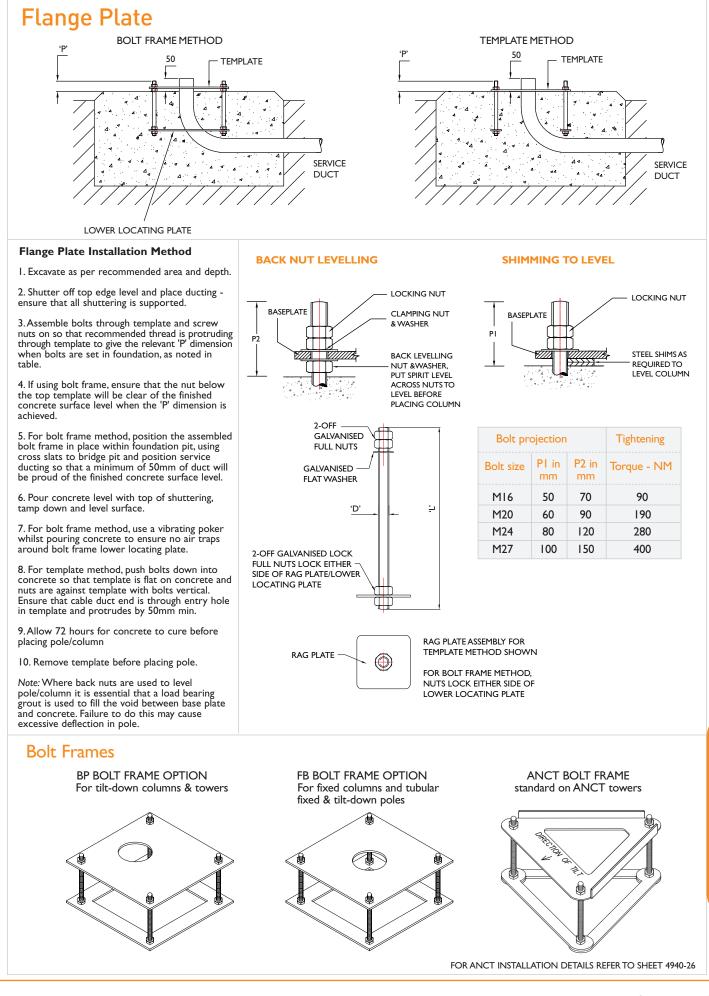
Offset loads on tilt-down products are not so desirable, unless in line with the direction of tilt, or if they are balanced (an equal load either side so when tilting the product, it is balanced). If the off-set load is not balanced, then this produces a side load at the hinge point, which can cause the hinge to bind, overloading the winch mechanism and is also a force that the hinge is not designed to take. We therefore recommend that a side load on a tilt-down product is only in line with the direction of tilt, or equal either side, so a balanced load.

Positioning Foundations

The following factors should be considered when assessing the location of a foundation in accordance with the type of product being used.



Installation Methods \leftarrow



Technical

\rightarrow Installation Methods

PM Method for columns and towers

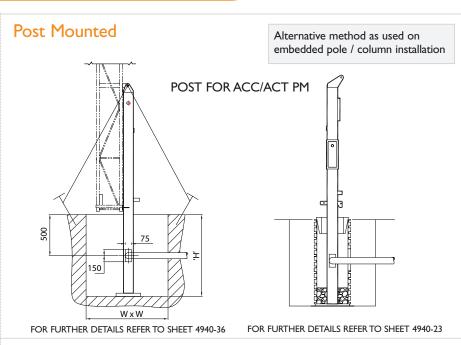
- I. Excavate as per recommended area and depth.
- 2. Shutter off top edge level and place ducting - ensure that all shuttering is supported.
- 3. Place 100mm of hardcore (paving slab) under post.
- 4. Guy from top of post with 3-4 stakes and guy ropes.
- 5. Plumb level post by adjusting guy ropes position ducting as required, ensuring it is supported sufficiently.
- 6. Pour concrete and check post for plumb.
- 7. Allow 72 hours for concrete to cure.
- 8. Remove guys and stakes.
- 9. Fix tower to post.

Embedded base installation method

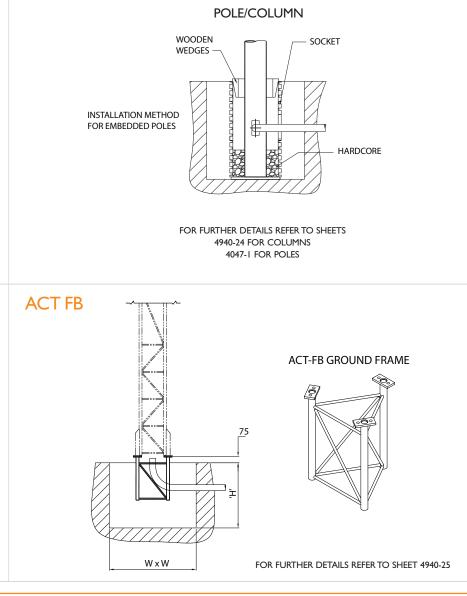
- Excavate as per recommended area and 1. depth
- Set socket into excavated pit on 2no 1 inch 2. thick slabs or suitable hardcore
- Ensure socket verticality and that it is 3. supported centrally.
- Position service duct so that 100mm enters 4 the socket, ensuring correct orientation with service entry point on pole.
- Pour concrete on the outside of the pipe 5. and fill pit to just below the top level of the socket.
- Allow to cure for minimum of 72 hours 6.
- Lower pole into socket and support in position for operations 8-11 7.
- 8 Fill hardcore and sand around the base of the pole to a depth of approx 150mm
- Pack this down so that it is well compressed
 Select timber wedges and wedge pole in 3 places ensuring pole is vertical
 For poles up to 7 metres in height pour
- concrete into open socket. For poles over 7 metres in height use a cementitious grout instead of concrete. Use a vibrating poker to ensure no voids or air traps.
- Allow 72 hours to cure
 Remove wedges and fill gaps with grout

FB Method for towers

- I. Excavate as per recommended area and depth.
- 2. Shutter off top edge level and place ducting - ensure that all shuttering is supported.
- 3. Support tower ground frame in excavated base by tying wooden slat across top of frame and resting end of slat either side of base.
- 4. Support slats in raised position so that top of tower ground frame is 75mm proud of base surface.
- 5. Position ducting so that it enters the base next to the required tower leg.
- 6. Level frame across the 3 No. flange ends. 7. Pour concrete and then check frame is level.
- 8. Allow 72 hours for concrete to cure before placing tower.



Embedded Base

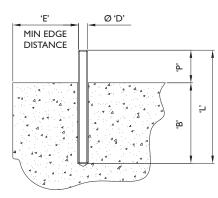


Alternative holding down methods

Installation of chemical anchors

For use on existing cast foundations or as an alternative to standard holding down bolts.

- o We recommend the use of chemical anchors over expanding sheath type anchors.
- o We can supply the chemical anchors shown below ex stock.
- o For full details on chemical anchors and installation method please contact our Sales team.



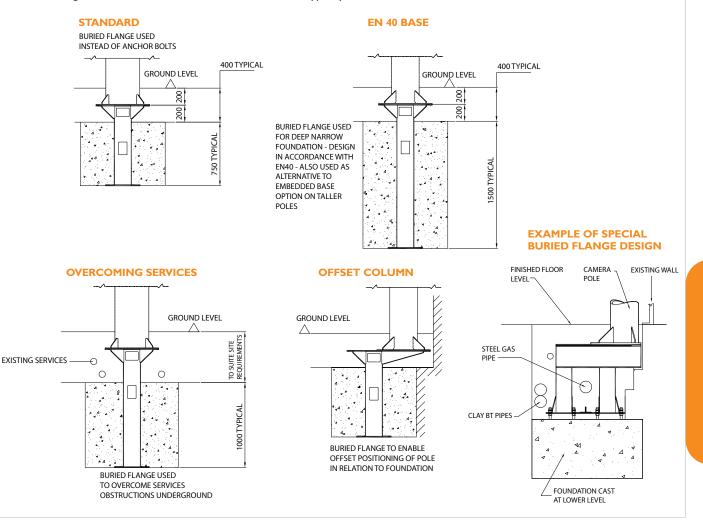
ØD	Р	В	i L		E
M16	65	125	190		170
M20	90	170	260		220
M24	85	210	29	5	260
M27	100	240	34	0	300
TE	MP°C	TIM DR			CURE /VET
	0	15 H	IRS	30 HRS	
	10	3 H	RS 6 HRS		HRS
	20	30 M	0 MINS I H		HR

Installation method
I. Drill correct diameter and depth of hole for the stud.
2. Clean the hole using a brush and air pump.
3. Insert chemical capsule into the hole connect stud to drilling machine using an appropriate driver.
4. Offer stud to capsule and switch on machine. Drive stud into capsule to full depth. To prevent over mixing, stop rotation as soon as bottom of hole is reached. Leave undisturbed until resin has set.
5. Position baseplate and tighten to recommended torque.

To ensure correct installation of chemical anchor bolts an experienced contractor should be employed.

Buried flange members

o Where underground services restrict the possible location of the foundation/ camera position, buried Flange Members can often overcome congestion & provide a solution. Buried flange members can also be used as an alternative to other standard holding down methods and also to acheive installations typically outlined below, where other methods are not suitable.



Due to our policy of continuous product improvement specifications may change without notice

Technical

All products in this brochure are manufactured to the following standards.

Design

Poles

Windloading and structural design in accordance with ILE TR7 (the Institute of Lighting Engineers' Technical Report Number 7 high masts for lighting and CCTV 2000 edition). Design analysis is carried out using a specialist software package in accordance with ILE TR7, BS6399 and BS8100. We also produce designs in accordance with EN40/BS5649 and BD94/07 (Highways structures design : Design of minor structures)

Towers

Windloading and structural design is carried out using our specialist software package in accordance with BS8100 PT1, 'Code of practice for loading' and BS8100 PT3, 'Code of practice for strength assessment of members of lattice towers and masts', and fully complies with May 2005 amendment for increased windloading upon structures up to 10 metres above ground level.

Foundations

As standard in accordance with BS8004 for a safety factor better than 2:1.We can design to BD94/07 for highways and BSEN40 where required, for planted/direct burial foundations.

Material and Finishing

- Structural steel hollow sections EN10219 EN10025:2004
- Steel flat angles and structural sections EN10025, EN10111, EN 10130
- Stainless steel sections Grade 304,316
- Aluminium section Grade 6082
- Foundation bolts Grade 4.6 spun galvanised BS4190, BS3692, DIN931, 934, 601
- Fixings: stainless steel Grade A2, galvanised Grade 4.6 Grade 8.8
 BS4190, BS3692, DIN 931, 934, 601
- Hot dipped galvanising after fabrication to ISO 1461
- Painting in BS and RAL colours in accordance with BS4800

Manufacturing

- Welding Procedures conform with BSEN 1011: 1998, BSEN 287
- Testing procedures for welders where applicable to BSEN 15614

Winches

- Wire ropes to BS183/5281
- Winches conform with American ASAE standard S361.IT.



AW 1545 with dual lighting arm



Stainless steel pole London Eye

Gallery \leftarrow



AWI545/6TD/BAS



AW1934/4/LHT



AWI545/12 Marble Arch

\rightarrow Gallery



AVV1859/4



6m cantilever pole with 5m arm



Stainless steel tubular pole Wembley







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