ValuLine® Antennas

ANDREW®

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A Cost-Effective Antenna Solution for Today's Terrestrial Microwave Systems

ValuLine® antennas provide a cost-effective solution for all terrestrial microwave systems operating at frequencies between 7 GHz and 60 GHz. The ValuLine range includes high performance low profile antennas (VHLP Series), high performance shielded antennas (VHP Series) and standard performance unshielded antennas (VP Series). These antennas are available in both single and dual polarized configurations and in sizes from 8 in (0.2 m) to 6 ft (1.8 m) in diameter.

Andrew ValuLine antennas economically satisfy the requirements of the cellular, PCS/PCN, broadcast, and private user microwave applications, while still delivering the superior performance and overall quality expected of Andrew. ValuLine antennas meet the regulatory requirements of FCC, ETSI, RA, and BAPT and are qualified in many countries including Russia, Brazil, and Poland.The antennas meet the requirements of the EIA195 and 222 standards for electrical, mechanical, and structural characteristics, and are backed by a three-year warranty.

Fast, easy installation is made possible by the use of simple pole mounts that attach to pipes with diameters ranging from 1.9 inches (48 mm) to 4.5 inches (115 mm), depending on antenna type. Radome installation on the 4 ft (1.2 m) and 6 ft (1.8 m) antennas is dramatically simplified by the use of rigid plastic radomes. Optionally, Andrew can supply the complete antenna painted to match local surroundings, minimizing the environmental impact. A new tower mount design eases antenna installation on 0.3 m and 0.6 m antennas. This mount, weighing only 3 kg, offers improved aesthetics and includes integral azimuth and elevation adjustment making antenna assembly and alignment extremely quick and easy.

ValuLine® Antennas Include:

Low Profile Antennas

To meet increasing demand for low visibility antenna systems, the ValuLine product range has been extended to include a new range of low profile shielded antennas (VHLP Series) offering excellent electrical performance in an antenna with minimal environmental impact. Low profile antennas are available in frequencies from 7 GHz to 38 GHz and in sizes from 8 in (0.2 m) to 4 ft (1.2 m) in diameter.

Flat Plate Antennas

The new ValuLine Flat Plate antennas provide the ultimate solution for operators who require low visibility antennas for short haul communications in areas such as congested inner city sites. These antennas provide excellent pattern performance, normally only achieved by shielded antennas, in a package less than 2 inches (46 mm) deep. This very low profile antenna, weighing less than 8 pounds (3.6 kg), reduces tower wind loading and is a cost-effective package for worldwide shipping.

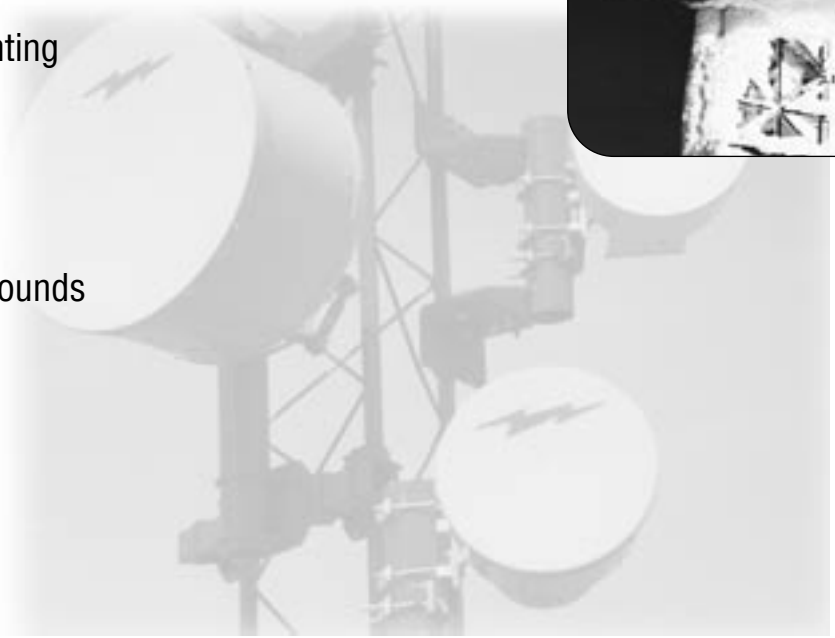
Products are available in the 23 GHz, 27 GHz and 38 GHz frequency bands.

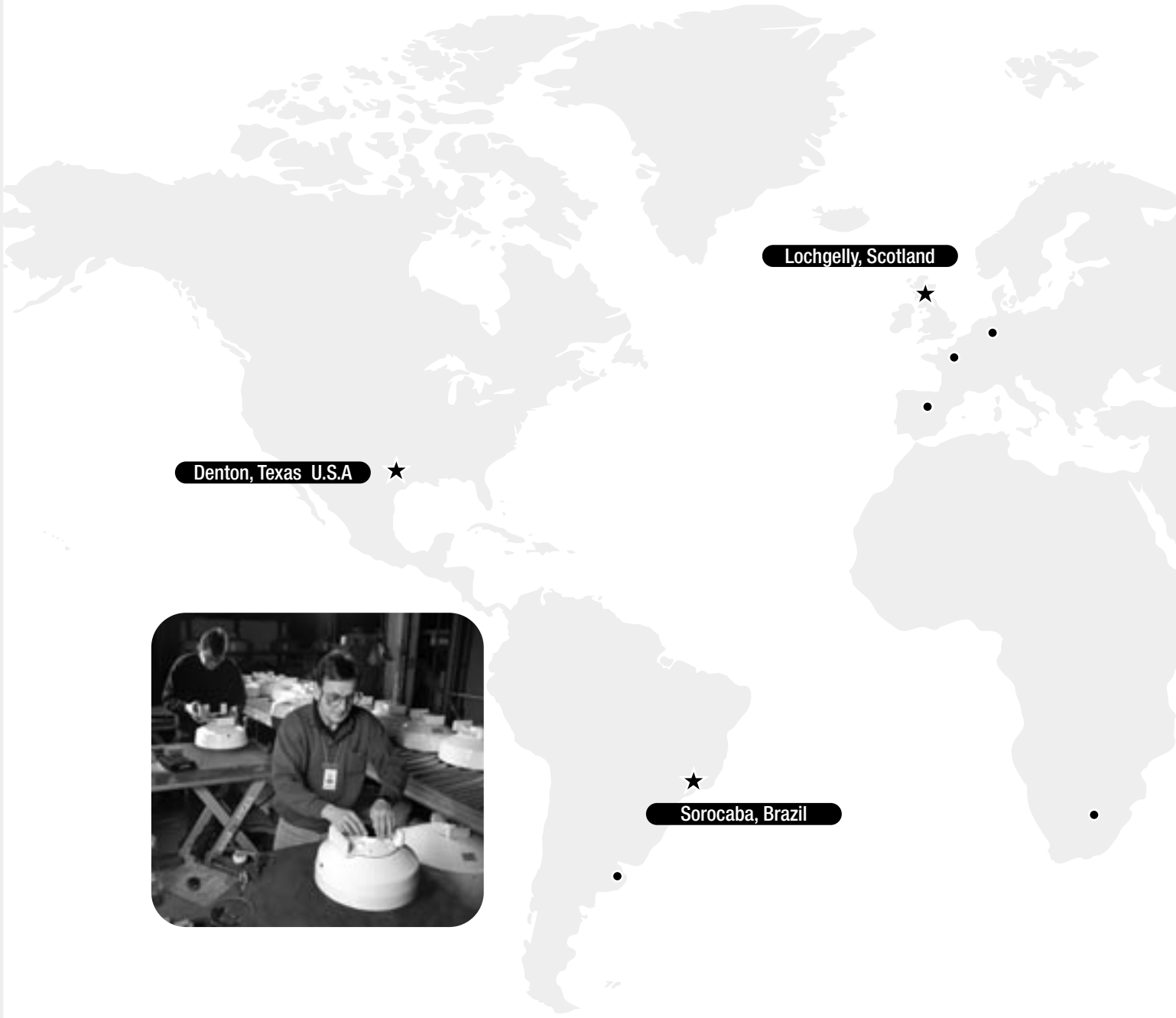
Contact Andrew for further details.

E-Series ValuLine Antennas

ValuLine antennas are now available in upgraded versions that allow them to be used in locations subjected to high wind load or corrosive environments.These antennas, available in diameters of 8 in (0.2 m), 1 ft (0.3 m), 2 ft (0.6 m), 2.5 ft (0.8 m), 4 ft (1.2 m), and 6 ft (1.8 m), are mechanically upgraded to withstand 155 mph (250 km/h) through the use of additional struts and strengthened reflectors.The antennas also include additional treatments that will provide long-term protection in marine, urban, and most industrial environments.

- Factory applied epoxy painting
- Hot-dip galvanizing
- Stainless steel hardware
- Corrosion inhibiting compounds

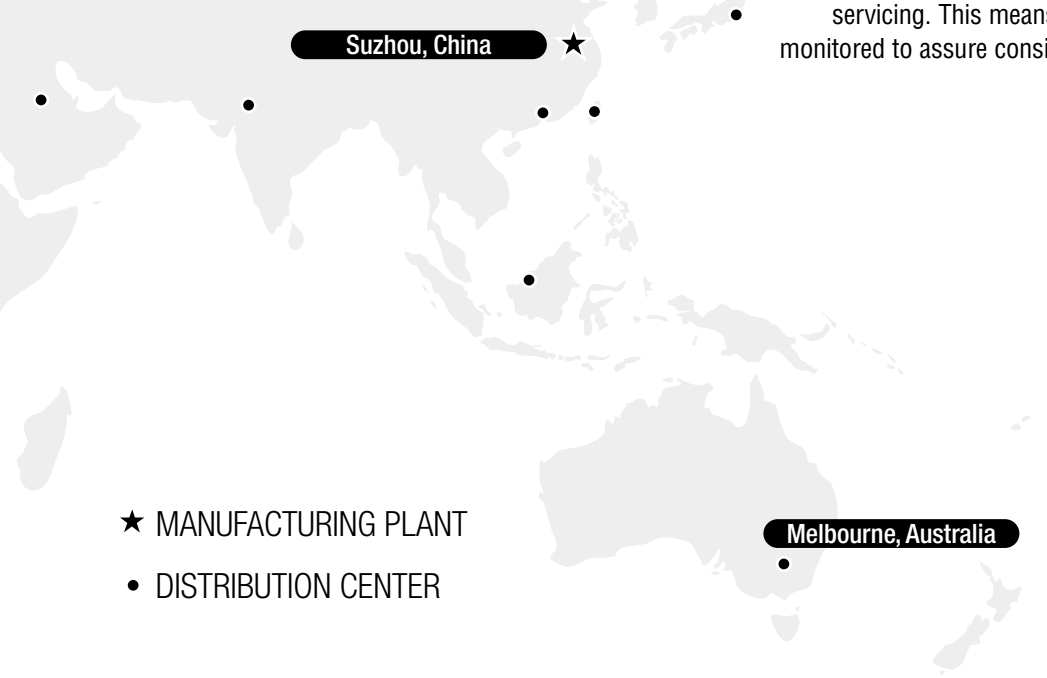



Lochgelly, Scotland
Denton, Texas U.S.A
Sorocaba, Brazil

Global Manufacturing and Distribution: In order to reduce shipping costs to sites worldwide, ValuLine® antennas are available from Andrew locations in Scotland, U.S.A., Brazil, and Australia. Standard Andrew designs and process controls ensure product consistency and quality throughout the world.

In today's competitive telecommunications market where the speed of system deployment and reduced shipping costs are imperative, Andrew can help contribute to your success through their network of manufacturing and distribution facilities located around the world. The advantages of Andrew Corporation's multiple manufacturing locations are now widely used by the world's leading radio manufacturers to ensure they can provide the level of service expected by their global customer base in the timescales they require.

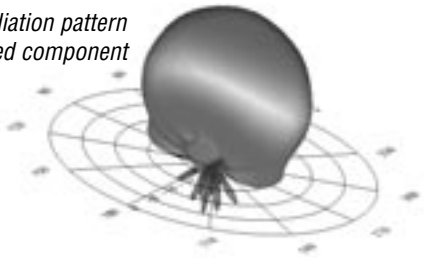
ValuLine antennas manufacturing processes comply with stringent ISO 9001 internal quality control requirements for processes ranging from design and development to production, installation and servicing. This means manufacturing is standardized and monitored to assure consistently superior performance worldwide.



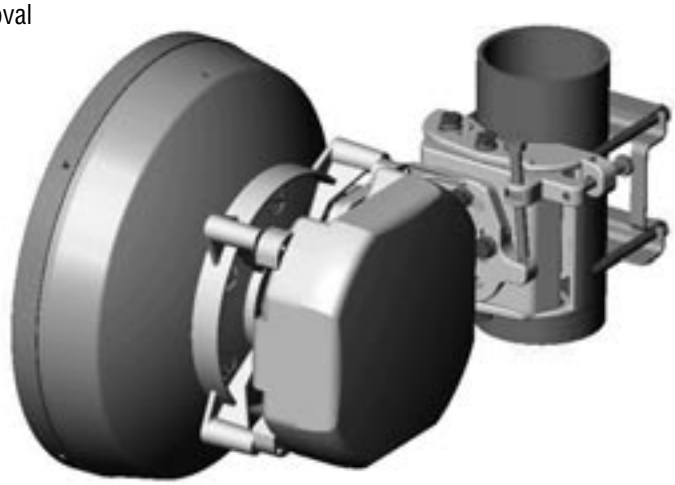
★ MANUFACTURING PLANT

• DISTRIBUTION CENTER

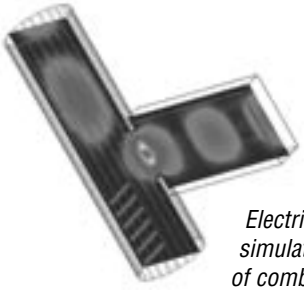
All ValuLine® antennas are designed by a dedicated team of highly qualified mechanical and RF engineers working together to produce designs that will meet the needs of the global telecommunications market. Through the use of today's leading computer aided design and analysis software packages, Andrew can produce product designs that will withstand all types of weather over many years without any degradation of electrical or mechanical performance. From initial development in the laboratories through to final product approval in environmental test chambers and on RF test ranges, our engineers work continuously to ensure that the quality and performance of the products released to the market is at the high level expected of Andrew.



Simulated radiation pattern of antenna feed component

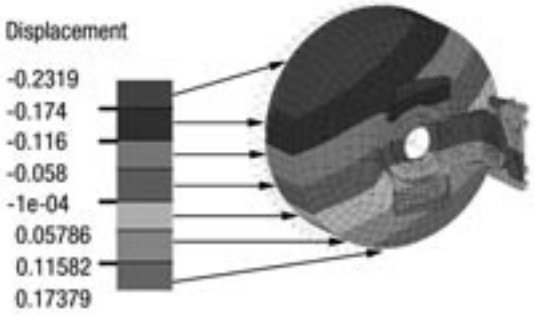


Solid model of antenna with integrated radio outdoor unit



Electrical simulation of combiner

Finite element analysis displacement plot of antenna



Antenna Test Qualifications

Valuline antennas are manufactured to withstand severe environmental conditions. These tests include wind, water, and salt fog. Contact your Andrew Representative for more a detailed discussion of specific test results.

Wind Tunnel Testing

Water Ingress Testing

Salt Spray Testing

Antennas With Direct Radio Integration

Andrew has worked with the world's leading radio houses to develop antennas that can be directly integrated with the radio outdoor unit. These integrated antennas are available in all frequencies from 7 GHz to 38 GHz and in sizes from 8 in (0.2 m) to 6 ft (1.8 m) in diameter. These integrated solutions, currently available for over 20 major radio suppliers, provide a significant benefit in overall system cost. Pictured below are examples of ValuLine antennas with integrated radios from a variety of leading OEM's.

DMC Stratex

Harris

Ceragon

Siemens

NEC

P-COM

Tellumat

SIAE

Tadiran

Antenna Ordering Information

Our ValuLine® antennas are presented in the tables on pages 10-17. The tables are arranged by operating frequency band, in ascending order. Within the tables, antennas are grouped by antenna type and by diameter.

Basic Antenna Type Numbers

The type numbers listed in the tables define the basic antenna, less options and accessories. The numbers correspond with those appearing on the Radiation Pattern Envelopes published by Andrew (see page 48 of the Andrew Catalog 38) and also define the electrical performance parameters of the antenna.

Radomes

Radomes are used to protect microwave antennas against accumulation of ice, snow, and dirt and to reduce wind loading. ValuLine shielded antennas are supplied with molded planar polymer radomes.

Antenna Options and Accessories

Input Flanges

ValuLine antennas can be supplied with many different EIA and IEC flange types.
The recommended flanges are identified in the specification tables beginning on page 35.

VR Series of Plastic Radomes

The VR Series of plastic radomes are designed to offer maximum protection to VP and VPX Series unshielded ValuLine antennas in diameters ranging from 2 ft (0.6 m) to 6 ft (1.8 m). The material is highly resistant to ultraviolet rays and provides high reliability under severe environmental conditions. Their aerodynamic shape dramatically reduces the wind loading on the tower.

These radomes are available as standard in gray or white. Bulk pack options are also available on request.

Contact Andrew for more information.

Radome Applications

Antenna Type	Antenna Series	Included Radome	Optional Radomes
ValuLine®	VHP, VHPX	Polymer	–
	VP, VPX	–	Molded plastic (VR Series)

VR Series Radomes for Unshielded ValuLine Antennas

Antenna Diameter	Gray Radome with Andrew flash	Gray Radome without Andrew flash	White Radome with Andrew flash	White Radome without Andrew flash
2 ft (0.6 m)	**VR2-1**	**VR2-2**	**VR2-1-WH**	**VR2-2-WH**
4 ft (1.2 m)	**VR4-1**	**VR4-2**	**VR4-1-WH**	**VR4-2-WH**
6 ft (1.8 m)	**VR6-1**	**VR6-2**	**VR6-1-WH**	**VR6-2-WH**

Valuline® Antenna Nomenclature

Andrew uses an alphanumeric numbering system for identifying and ordering ValuLine antennas. Andrew type numbers describe the antenna type, size, regulatory compliance, frequency band, catalog revision, and other available options including flange type and VSWR specifications, antenna and radome color, and packing and assembly information. This system is known worldwide and Andrew terminology is often used to specify antenna within procurement documents.

VHP	2	A	-	220	A	-	2	4	1
❶	❷	❸		❹	❺		❻	❼	❽

VHP2A-220A-241 is:

❶ ValuLine High Performance, shielded, single polarized
❷ 2 ft (0.6 m) in diameter
❸ Non-compliant to UK RA specifications
❹ 21.2-23.6 GHz band
❺ A Revision
❻ PBR220, 1.20 VSWR
❼ White antenna, white radome, no flash
❽ Standard packing

❶ **Antenna Type:** The prefix is two, three, or four letters that describe the antenna type.

Use	*To indicate*
VHP	Shielded, Single Polarized
VHPX	Shielded, Dual Polarized
VP	Unshielded, Single Polarized
VHLP	Low Profile, Single Polarized
VHLPX	Low Profile, Dual Polarized
VFP	Flat Panel

❷ **Antenna Size:** The number indicates the antenna diameter in feet:

Use	*To indicate*
1	1 ft (0.3 m)
2	2 ft (0.6 m)
2.5	2.5 ft (0.8 m)
4	4 ft (1.2 m)
6	6 ft (1.8 m)
150	0.5 ft (0.15m)
200	0.65 ft (0.2m)

❸ **Regulatory Compliance:**

Use	*To indicate*
blank	Compliant to UK RA Specification
A	Non-compliant to UK RA Specification

Contact your Andrew representative for specific part numbers.

❹ **Frequency Band:** The numbers following the first hyphen are an abbreviated designation for the operating frequency band.

Use	*To indicate*	*Use*	*To indicate*
71	7.125-7.75 GHz	**180**	17.7-19.7 GHz
71W	7.125-8.5 GHz	**220**	21.2-23.6 GHz
74	7.425-7.9 GHz	**240**	24.25-26.5 GHz
77	7.725-8.5 GHz	**240W**	24.25-29.5 GHz
102	10.2-10.7 GHz	**275**	27.5-29.5 GHz
105	10.5-10.7 GHz	**275W**	27.5-29.5 GHz/ 31.0-31.3 GHz
107	10.7-11.7 GHz		
117	11.7-12.2 GHz	**310**	31.0-31.8 GHz
130	12.75-13.25 GHz	**370**	37.0-40.0 GHz
142	14.25-15.35 GHz	**490**	49.2-50.2 GHz
159	15.9-16.5 GHz	**540**	54.25-57.2 GHz
173	17.3-17.7 GHz	**570**	57.2-58.2 GHz
1823	17.7-19.7 GHz/ 21.2-23.6 GHz		

❺ **Catalog Revision:** This letter identifies product revisions. A change in revision letter indicates a change in electrical or mechanical specifications that affect antenna performance or the interface with other system equipment.

❻ **Antenna Flange Type and VSWR Specification:** Refer to the tables on page 35.

❼ **Antenna Appearance:** This number identifies the antenna color, radome color, and the presence of the Andrew flash.

❽ **Packing Type and Assembly Options:** Refer to the tables on page 34.

5.925-6.425 GHz (WR137/R70)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-59	1.2	5.925 - 6.425	35.5	35.9	36.3	2.7	32	47	1.10 (26.4)	±15	±20	125 (200)	79 (36.0)
VP6-59	1.8	5.925 - 6.425	38.8	39.4	39.7	1.8	32	50	1.10 (26.4)	±5	±5	125 (200)	160 (72.5)
VHP4-59	1.2	5.925 - 6.425	34.1	34.7	35.0	3.0	32	60	1.15 (23.1)	±15	±20	125 (200)	126 (57.0)

5.925-7.125 GHz (WR137/R70)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-59W	1.2	5.925 - 7.125	35.5	36.3	36.9	2.7	32	47	1.15 (23.1)	±15	±20	125 (200)	79 (36.0)
VP6-59W	1.8	5.925 - 7.125	38.8	39.7	40.5	1.8	32	50	1.15 (23.1)	±5	±5	125 (200)	160 (72.5)
VHP4-59W	1.2	5.925 - 7.125	34.1	35.0	35.7	2.9	32	60	1.20 (20.8)	±15	±20	125 (200)	126 (57.0)

6.425-7.125 GHz (WR137/R70)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-64	1.2	6.425 - 7.125	36.3	36.6	36.9	2.6	32	47	1.10 (26.4)	±15	±20	125 (200)	79 (36.0)
VP6-64	1.8	6.425 - 7.125	39.7	40.0	40.5	1.7	32	50	1.10 (26.4)	±5	±5	125 (200)	160 (72.5)
VPX4-64	1.2	6.425 - 7.125	36.0	36.3	36.7	2.5	32	47	1.10 (26.4)	±15	±20	125 (200)	79 (36.0)
VHP4-64	1.2	6.425 - 7.125	35.0	35.3	35.7	2.8	32	60	1.15 (23.1)	±15	±20	125 (200)	126 (57.0)
VHPX4-64	1.2	6.425 - 7.125	34.7	35.0	35.3	2.8	32	60	1.15 (23.1)	±15	±20	125 (200)	126 (57.0)

7.125-7.75 GHz (WR112/R84)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-71	1.2	7.125 - 7.75	36.8	37.2	37.5	2.4	32	45	1.15 (23.1)*	±15	±20	125 (200)	79 (36.0)
VP6-71	1.8	7.125 - 7.75	40.5	40.9	41.3	1.6	32	49	1.15 (23.1)*	±5	±5	125 (200)	160 (72.5)
VHP2-71	0.6	7.125 - 7.75	29.8	30.1	30.4	4.9	30	53	1.15 (23.1)*	±10	±25	155 (250)	29.7 (13.5)
VHP4-71	1.2	7.125 - 7.75	36.0	36.4	36.7	2.4	32	60	1.15 (23.1)*	±15	±20	125 (200)	126 (57.0)
VHP6-71	1.8	7.125 - 7.75	39.7	40.0	40.4	1.6	32	68	1.15 (23.1)*	±5	±5	125 (200)	347 (157.5)
VHPX2-71	0.6	7.125 - 7.75	29.2	29.5	29.8	4.8	30	53	1.30 (17.7)**	±10	±25	155 (250)	29.7 (13.5)
VHPX4-71	1.2	7.125 - 7.75	35.9	36.3	36.6	2.4	32	60	1.15 (23.1)*	±15	±20	125 (200)	126 (57.0)
VHPX6-71	1.8	7.125 - 7.75	39.6	40.0	40.4	1.6	30	68	1.15 (23.1)*	±5	±5	125 (200)	347 (157.5)

* : 1.10 (26.4) available on request
** : 1.25 (19.1) available on request

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

7.125-8.5 GHz (WR112/R84)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-71W	1.2	7.125 - 8.5	36.8	37.5	38.3	2.3	32	45	1.15 (23.1)	±15	±20	125 (200)	79 (36.0)
VP6-71W	1.8	7.125 - 8.5	40.5	41.3	42.0	1.5	32	49	1.15 (23.1)	±5	±5	125 (200)	160 (72.5)
VHP2-71W	0.6	7.125 - 8.5	29.8	30.4	31.1	4.9	30	53	1.15 (23.1)	±10	±25	155 (250)	29.7 (13.5)
VHP4-71W	1.2	7.125 - 8.5	36.0	36.6	37.5	2.4	32	60	1.15 (23.1)	±15	±20	125 (200)	79 (36.0)
VHP4-71WA	1.2	7.125 - 8.5	35.8	36.4	37.3	2.4	32	65	1.15 (23.1)	±15	±20	125 (200)	79 (36.0)
VHP6-71W	1.8	7.125 - 8.5	39.7	40.4	40.8	1.5	32	68	1.15 (23.1)	±5	±5	125 (200)	160 (72.5)
VHPX2-71W	0.6	7.125 - 8.5	29.2	29.8	30.4	4.8	30	53	1.30 (17.7)	±10	±25	155 (250)	29.7 (13.5)
VHPX4-71W	1.2	7.125 - 8.5	35.9	36.7	37.4	2.4	32	60	1.20 (20.8)	±15	±20	125 (200)	126 (57.0)
VHPX6-71W	1.8	7.125 - 8.5	39.6	40.4	40.9	1.5	30	68	1.20 (20.8)	±5	±5	125 (200)	347 (157)
VHLP2-71W	0.6	7.125-8.5	30.0	30.9	31.8	4.2	30	57	1.30 (17.7)	±10	±25	125 (200)	35.2 (16.0)
VHLP4-71W	1.2	7.125-8.5	35.8	36.5	37.0	2.4	32	62	1.15 (23.1)	±15	±20	125 (200)	79 (36.0)
VP4-71W-N	1.2	7.125 - 8.5	36.8	37.5	38.3	2.3	32	45	1.15 (23.1)	±15	±20	125 (200)	79 (36.0)
VP6-71W-N	1.8	7.125 - 8.5	40.5	41.3	42.0	1.5	32	49	1.15 (23.1)	±5	±5	125 (200)	160 (72.5)
VHP2-71W-N	0.6	7.125 - 8.5	29.8	30.4	31.1	4.9	30	53	1.15 (23.1)	±10	±25	155 (250)	29.7 (13.5)
VHP4-71W-N	1.2	7.125 - 8.5	36.0	36.6	37.5	2.4	32	60	1.15 (23.1)	±15	±20	125 (200)	126 (57.0)
VHP6-71W-N	1.8	7.125 - 8.5	39.7	40.4	40.8	1.5	32	68	1.15 (23.1)	±5	±5	125 (200)	347 (157.5)

7.425-7.9 GHz (WR112/R84)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4A-74	1.2	7.425 - 7.90	37.2	37.4	37.7	2.3	32	45	1.15 (23.1)*	±15	±20	125 (200)	79 (36.0)
VHP2-74	0.6	7.425 - 7.90	30.1	30.4	30.6	4.8	30	54	1.15 (23.1)*	±10	±25	155 (250)	29.7 (13.5)
VHP4-74	1.2	7.425 - 7.90	36.2	36.4	36.7	2.3	32	62	1.15 (23.1)*	±15	±20	125 (200)	126 (57.0)
VHP6-74	1.8	7.425 - 7.90	40.0	40.3	40.6	1.5	32	68	1.15 (23.1)*	±5	±5	125 (200)	347 (157.5)
VHPX2A-74	0.6	7.425 - 7.90	29.5	29.7	29.9	4.7	30	53	1.30 (17.7)**	±10	±25	155 (250)	29.7 (13.5)
VHPX4A-74	1.2	7.425 - 7.90	36.3	36.5	36.8	2.4	32	60	1.15 (23.1)*	±15	±20	125 (200)	126 (57.0)
VHPX6A-74	1.8	7.425 - 7.900	40.0	40.3	40.6	1.5	30	68	1.15 (23.1)*	±5	±5	125 (200)	347 (157.5)

* : 1.10 (26.4) available on request
** : 1.25 (19.1) available on request

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

7.75-8.5 GHz (WR112/R84)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-77	1.2	7.75 - 8.50	37.5	37.9	38.3	2.2	32	46	1.15 (23.1)*	±15	±20	125 (200)	79 (36.0)
VP6-77	1.8	7.75 - 8.50	41.3	41.7	42.0	1.5	32	50	1.15 (23.1)*	±5	±5	125 (200)	160 (72.5)
VHP2-77	0.6	7.75 - 8.50	30.4	30.8	31.1	4.6	30	54	1.15 (23.1)*	±10	±25	155 (250)	29.7 (13.5)
VHP4-77	1.2	7.75 - 8.50	36.7	37.1	37.5	2.2	32	62	1.15 (23.1)*	±15	±20	125 (200)	126 (57.0)
VHP6-77	1.8	7.75 - 8.50	40.4	40.6	40.8	1.5	32	68	1.15 (23.1)*	±5	±5	125 (200)	347 (157.5)
VHPX2-77	0.6	7.75 - 8.50	29.8	30.1	30.4	4.6	30	53	1.30 (17.7)**	±10	±25	155 (250)	29.7 (13.5)
VHPX4-77	1.2	7.75 - 8.50	36.6	37.0	37.4	2.2	32	60	1.15 (23.1)*	±15	±20	125 (200)	126 (57.0)
VHPX6-77	1.8	7.75 - 8.50	40.4	40.7	40.9	1.5	30	68	1.15 (23.1)*	±5	±5	125 (200)	347 (157.5)

* : 1.10 (26.4) available on request
** : 1.25 (19.1) available on request

10.5-10.7 GHz (WR90/R100)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP2-105	0.6	10.5 - 10.7	34.0	34.1	34.2	3.4	32	55	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP4-105	1.2	10.5 - 10.7	39.8	39.9	40.0	1.8	32	60	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHP6-105	1.8	10.5 - 10.7	43.1	43.2	43.3	1.1	32	67	1.20 (20.8)*	±5	±5	125 (200)	347 (157.5)
VHLP2-105	0.6	10.5 - 10.7	34.0	34.1	34.2	3.2	30	60	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VHLP4-105	1.2	10.5 - 10.7	39.8	39.9	40.0	1.5	30	66	1.30 (17.7)	±15	±20	125 (200)	115 (52.0)

* : 1.15 (23.1) available on request

10.7-11.7 GHz (WR90/R100)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP2-107	0.6	10.7 - 11.7	34.2	34.4	34.7	3.4	32	55	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP4-107	1.2	10.7 - 11.7	40.1	40.5	40.9	1.8	32	60	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHP6-107	1.8	10.7 - 11.7	43.3	43.6	43.9	1.1	32	67	1.20 (20.8)*	±5	±5	125 (200)	347 (157.5)
VHLP2-107	0.6	10.7 - 11.7	34.2	34.8	35.5	2.9	30	61	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VHLP4-107	1.2	10.7 - 11.7	40.0	40.4	40.8	1.5	30	67	1.30 (17.7)	±15	±20	125 (200)	115 (52.0)

* : 1.15 (23.1) available on request

11.7-12.2 GHz (WR75/R120)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP2-117	0.6	11.7 - 12.2	34.5	34.7	34.9	3.1	32	62	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP4-117	1.2	11.7 - 12.2	40.9	41.0	41.1	1.7	32	60	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)

* : 1.15 (23.1) available on request

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

12.7-13.25 GHz (WR75/R120)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4A-130	1.2	12.7 - 13.25	42.0	42.2	42.4	1.3	32	52	1.20 (20.8)*	±15	±20	125 (200)	79.0 (36.0)
VP6A-130	1.8	12.7 - 13.25	45.0	45.2	45.3	0.9	32	58	1.20 (20.8)*	±5	±5	125 (200)	160 (72.5)
VHP1-130	0.3	12.7 - 13.25	29.0	29.2	29.4	5.0	30	56	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-130	0.6	12.7 - 13.25	35.1	35.3	35.5	2.8	32	61	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP2.5-130	0.8	12.7 - 13.25	37.7	37.9	38.1	2.1	32	63	1.20 (20.8)*	±15	±50	125 (200)	78 (35.5)
VHP4-130	1.2	12.7 - 13.25	41.2	41.4	41.6	1.3	32	67	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHP6-130	1.8	12.7 - 13.25	44.8	45.0	45.1	0.9	32	70	1.20 (20.8)*	±5	±5	125 (200)	347 (157.5)
VHPX2-130	0.6	12.7 - 13.25	34.5	34.7	34.9	2.8	32	61	1.25 (19.1)**	±10	±25	155 (250)	29.7 (13.5)
VHPX2.5-130	0.8	12.7 - 13.25	37.2	37.5	37.7	2.1	32	63	1.25 (19.1)**	±15	±50	125 (200)	78 (35.5)
VHPX4-130	1.2	12.7 - 13.25	41.0	41.2	41.3	1.3	32	67	1.25 (19.1)**	±15	±20	125 (200)	126 (57.0)
VHPX6-130	1.8	12.7 - 13.25	44.6	44.8	44.9	0.9	32	70	1.25 (19.1)**	±5	±5	125 (200)	347 (157.5)
VHLP1-130	0.3	12.7 - 13.25	30.6	30.8	31.0	4.2	30	53	1.3	±10	±25	155 (250)	15 (6.8)
VHLP2-130	0.6	12.7 - 13.25	35.6	35.7	35.8	2.5	30	62	1.3	±10	±25	155 (250)	21.6 (9.8)
VHLP2.5-130	0.8	12.7 - 13.25	38.2	38.4	38.6	2.1	30	65	1.3	±15	±20	125 (200)	69 (31.2)
VHLP4-130	1.2	12.7 - 13.25	41.9	42.0	42.1	1.3	30	68	1.3	±15	±50	125 (200)	115 (52.0)

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

14.25-15.35 GHz (WR62/R140)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4A-142	1.2	14.25 - 15.35	42.4	42.7	43.0	1.2	32	53	1.20 (20.8)*	±15	±20	125 (200)	79.0 (36.0)
VHP1-142	0.3	14.25 - 15.35	30.8	31.1	31.4	4.5	30	50	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-142	0.6	14.25 - 15.35	36.2	36.5	36.8	2.4	32	62	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP2.5-142	0.8	14.25 - 15.35	38.8	39.1	39.4	1.8	32	64	1.20 (20.8)*	±15	±50	125 (200)	78 (35.5)
VHP4-142	1.2	14.25 - 15.35	42.2	42.5	42.8	1.2	32	68	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHP6-142	1.8	14.25 - 15.35	45.7	46.0	46.3	0.8	32	71	1.20 (20.8)*	±5	±5	125 (200)	347 (157.5)
VHPX2-142	0.6	14.25 - 15.35	36.0	36.3	36.6	2.4	32	62	1.25 (19.1)**	±10	±25	155 (250)	29.7 (13.5)
VHPX2.5-142	0.8	14.25 - 15.35	38.6	38.9	39.2	1.8	32	64	1.25 (19.1)**	±15	±50	125 (200)	78 (35.5)
VHPX4-142	1.2	14.25 - 15.35	42.0	42.3	42.6	1.2	32	68	1.25 (19.1)**	±15	±20	125 (200)	126 (57.0)
VHPX6-142	1.8	14.25 - 15.35	45.5	45.8	46.1	0.8	32	71	1.25 (19.1)**	±5	±5	125 (200)	347 (157.5)
VHLP1-142	0.3	14.25 - 15.35	32.0	32.3	32.6	3.8	30	54	1.3	±10	±25	155 (250)	15 (6.8)
VHLP2-142	0.6	14.25 - 15.35	36.9	37.1	37.3	2.2	30	65	1.3	±10	±25	155 (250)	21.6 (9.8)
VHLP2.5-142	0.8	14.25 - 15.35	39.3	39.7	40.1	1.8	30	68	1.3	±15	±50	125 (200)	69 (31.2)
VHLP4-142	1.2	14.25 - 15.35	42.7	42.9	43.1	1.2	30	71	1.3	±15	±20	125 (200)	115 (52.0)

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

17.3-17.7 GHz (WR51/R180)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Gain (dBi) Mid	Gain (dBi) Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-173	1.2	17.3 - 17.7	44.1	44.2	44.3	1.0	32	55	1.20 (20.8)*	±15	±20	125 (200)	79.0 (36.0)
VP6-173	1.8	17.3 - 17.7	47.5	47.6	47.7	0.8	32	58	1.20 (20.8)*	±5	±5	125 (200)	160 (72.5)
VHP1-173	0.3	17.3 - 17.7	32.4	32.5	32.6	3.8	30	58	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-173	0.6	17.3 - 17.7	38.0	38.1	38.2	2.3	32	64	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)

* : 1.15 (23.1) available on request

17.7-19.7 GHz (WR42/R220)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Gain (dBi) Mid	Gain (dBi) Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4-180A	1.2	17.7 - 19.7	44.3	44.8	45.3	0.9	32	53	1.20 (20.8)*	±15	±20	125 (200)	79.0 (36.0)
VP6-180A	1.8	17.7 - 19.7	47.7	48.2	48.7	0.7	32	57	1.20 (20.8)*	±5	±5	125 (200)	160 (72.5)
VHP1-180	0.3	17.7 - 19.7	32.6	33.1	33.5	3.6	30	58	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-180B	0.6	17.7 - 19.7	38.2	38.7	39.1	1.9	32	60	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP2.5-180	0.8	17.7 - 19.7	40.7	41.2	41.6	1.5	32	66	1.20 (20.8)*	±15	±50	125 (200)	78 (35.5)
VHP4-180A	1.2	17.7 - 19.7	44.1	44.6	45.1	0.9	32	65	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHP6-180A	1.8	17.7 - 19.7	47.5	48.0	48.5	0.7	32	70	1.20 (20.8)*	±5	±5	125 (200)	347 (157.5)
VHPX1-180	0.3	17.7 - 19.7	32.4	32.9	33.3	3.6	30	58	1.25 (19.1)**	±10	±25	155 (250)	18 (8.2)
VHPX2-180A	0.6	17.7 - 19.7	38.0	38.4	38.8	1.9	32	60	1.25 (19.1)**	±10	±25	155 (250)	29.7 (13.5)
VHPX2.5-180	0.8	17.7 - 19.7	40.5	41.0	41.4	1.5	32	66	1.25 (19.1)**	±15	±50	125 (200)	78 (35.5)
VHPX4-180A	1.2	17.7 - 19.7	44.0	44.5	45.0	0.9	32	65	1.25 (19.1)**	±15	±20	125 (200)	126 (57.0)
VHPX6-180A	1.8	17.7 - 19.7	47.4	47.9	48.4	0.7	32	70	1.25 (19.1)**	±5	±5	125 (200)	347 (157.5)
VHLP1-180	0.3	17.7 - 19.7	33.5	34.0	34.4	3.0	30	55	1.30 (17.7)	±10	±25	155 (250)	15 (6.8)
VHLP2-180	0.6	17.7 - 19.7	38.2	38.7	39.1	1.8	30	67	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VHLP2.5-180	0.8	17.7 - 19.7	40.5	41.0	41.4	1.5	30	69	1.30 (17.7)	±15	±50	125 (200)	69 (31.2)
VHLP4-180	1.2	17.7 - 19.7	44.2	44.7	45.1	0.9	30	72	1.30 (17.7)	±15	±20	125 (200)	115 (52.0)
VHLPX2-180	0.6	17.7 - 19.7	38.2	38.7	39.1	1.8	30	67	1.30 (17.7)	±10	±25	155 (250)	33 (15.0)

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

17.7-19.7 / 21.2-23.6 GHz Multiband (WR42/R220)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Gain (dBi) Mid	Gain (dBi) Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP2-1823	0.6	17.7 - 19.7	37.6	38.1	38.6	1.9	30	67	1.30 (17.7)	±10	±25	155 (250)	29.7 (13.5)
		21.2 - 23.6	39.2	39.6	40.0	1.5	30	64	1.30 (17.7)				
VHP4-1823	1.2	17.7 - 19.7	43.7	44.2	44.7	0.9	30	68	1.30 (17.7)	±15	±20	125 (200)	126 (57.0)
		21.2 - 23.6	45.2	45.7	46.2	0.8	30	70	1.30 (17.7)				

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

21.2-23.6 GHz (WR42/R220)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VP4A-220	1.2	21.2 - 23.6	45.8	46.3	46.8	0.8	32	58	1.20 (20.8)*	±15	±20	125 (200)	79 (36.0)
VHP1-220	0.3	21.2 - 23.6	34.3	34.8	35.2	2.8	30	60	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-220A	0.6	21.2 - 23.6	39.6	40.1	40.5	1.6	32	68	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP2.5-220	0.8	21.2 - 23.6	42.1	42.6	43.1	1.4	32	68	1.20 (20.8)*	±15	±50	125 (200)	78 (35.5)
VHP4-220A	1.2	21.2 - 23.6	45.6	46.1	46.6	0.8	32	72	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHP6-220A	1.8	21.2 - 23.6	48.9	49.4	49.9	0.5	32	75	1.20 (20.8)*	±5	±5	125 (200)	347 (157.5)
VHPX1-220	0.3	21.2 - 23.6	33.7	34.2	34.6	2.8	30	60	1.25 (19.1)**	±10	±25	155 (250)	18 (8.2)
VHPX2-220A	0.6	21.2 - 23.6	39.4	39.9	40.3	1.6	32	66	1.25 (19.1)**	±10	±25	155 (250)	29.7 (13.5)
VHPX2.5-220	0.8	21.2 - 23.6	41.9	42.4	42.9	1.4	32	68	1.25 (19.1)**	±15	±50	125 (200)	78 (35.5)
VHPX4-220A	1.2	21.2 - 23.6	45.5	46.0	46.5	0.8	32	72	1.25 (19.1)**	±15	±20	125 (200)	126 (57.0)
VHPX6-220A	1.8	21.2 - 23.6	48.8	49.3	49.8	0.5	32	75	1.25 (19.1)**	±5	±5	125 (200)	347 (157.5)
VHLP200-220	0.2	21.2 - 23.6	30.5	31.1	31.5	4.5	30	56	1.40 (15.6)	±7.5	±15	155 (250)	9.9 (4.5)
VHLP1-220	0.3	21.2 - 23.6	34.4	34.9	35.4	2.3	30	61	1.30 (17.7)	±10	±25	155 (250)	15 (6.8)
VHLP2-220	0.6	21.2 - 23.6	39.6	40.1	40.6	1.4	30	66	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VHLP2.5-220	0.8	21.2 - 23.6	42.1	42.6	43.1	1.2	30	68	1.30 (17.7)	±15	±50	125 (200)	69 (31.2)
VHLP4-220	1.2	21.2 - 23.6	45.5	46.0	46.5	0.7	30	72	1.30 (17.7)	±15	±20	125 (200)	115 (52.0)
VFP1-220	0.3	21.2 - 23.6	31.0	31.3	31.6	2.8	35	58	1.50 (14.0)	±7.5	±15	155 (250)	7.9 (3.6)

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

24.25-26.5 GHz (WR42/R220)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-240A	0.3	24.25 - 26.5	35.5	35.9	36.3	2.5	30	62	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-240A	0.6	24.25 - 26.5	40.6	41.0	41.4	1.4	32	67	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHP2.5-240	0.8	24.25 - 26.5	43.2	43.6	44.0	1.1	32	70	1.20 (20.8)*	±15	±50	125 (200)	78 (35.5)
VHP4-240	1.2	24.25 - 26.5	46.5	46.9	47.2	0.7	32	73	1.20 (20.8)*	±15	±20	125 (200)	126 (57.0)
VHPX1-240A	0.3	24.25 - 26.5	35.3	35.7	36.1	2.5	30	62	1.25 (19.1)**	±10	±25	155 (250)	18 (8.2)
VHPX2-240A	0.6	24.25 - 26.5	40.4	40.8	41.2	1.4	32	67	1.25 (19.1)**	±10	±25	155 (250)	29.7 (13.5)
VHPX2.5-240	0.8	24.25 - 26.5	43.0	43.4	43.8	1.1	32	69	1.25 (19.1)**	±15	±50	125 (200)	78 (35.5)
VHPX4-240	1.2	24.25 - 26.5	46.3	46.7	47.0	0.7	32	73	1.25 (19.1)**	±15	±20	125 (200)	126 (57.0)
VHLP200-240	0.2	24.25 - 26.5	32.1	32.4	32.8	3.8	30	58	1.40 (15.6)	±7.5	±15	155 (250)	9.9 (4.5)
VHLP1-240	0.3	24.25 - 26.5	35.7	36.0	36.4	2.1	30	62	1.30 (17.7)	±10	±25	155 (250)	15 (6.8)
VHLP2-240	0.6	24.25 - 26.5	40.8	41.1	41.5	1.4	30	67	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VHLP2.5-240	0.8	24.25 - 26.5	43.1	43.6	44.0	0.8	30	70	1.30 (17.7)	±15	±50	125 (200)	69 (31.2)
VHLP4-240	1.2	24.25 - 26.5	46.5	46.9	47.2	0.6	30	73	1.30 (17.7)	±15	±20	125 (200)	115 (52.0)

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

24.25-27.5 GHz Wideband (WR42/R220)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHLP1-240W	0.3	24.25 - 27.5	35.6	36.6	35.8	2.4	30	62	1.40 (15.6)	±10	±25	155 (250)	15 (6.8)
VHLP2-240W	0.6	24.25 - 27.5	40.8	41.0	40.0	1.3	30	67	1.40 (15.6)	±10	±25	155 (250)	21.6 (9.8)

24.25-29.5 GHz Wideband (WR34/R260)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-240W	0.3	24.25 - 29.5	35.8	36.5	37.1	2.5	30	63	1.20 (20.8)	±10	±25	155 (250)	18 (8.2)
VHP2-240W	0.6	24.25 - 29.5	40.6	41.3	41.9	1.4	32	68	1.20 (20.8)	±10	±25	155 (250)	29.7 (13.5)

27.5-29.5 GHz (WR28/R320)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-275	0.3	27.5 - 29.5	36.3	36.6	36.9	2.2	30	62	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-275	0.6	27.5 - 29.5	41.2	41.5	41.8	1.2	32	68	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHLP1-275	0.3	27.5 - 29.5	36.6	36.9	37.2	2.0	30	63	1.30 (17.7)	±10	±25	155 (250)	15 (6.8)
VHLP2-275	0.6	27.5 - 29.5	41.6	41.9	42.2	1.2	30	68	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VFP150-275	0.15	27.5-29.5	29.8	30.4	30.6	4.1	33	44	1.50 (14)	±7.5	±15	155 (250)	2.2 (1.0)

* : 1.15 (23.1) available on request

27.5-31.3 GHz Wideband (WR28/R320)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHLP1A-275W	0.3	27.5 - 29.5	36.6	36.9	37.2	2.2	30	63	1.30 (17.7)	±10	±25	155 (250)	15 (6.8)
		31.0 - 31.3		37.5		1.7	30	63	1.40 (15.6)				
VHLP2A-275W	0.6	27.5 - 29.5	41.6	41.9	42.4	1.2	30	68	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
		31.0 - 31.3		43.1		1.0	30	68	1.40 (15.6)				
VHLP2.5A-275W	0.8	27.5 - 29.5	44.2	44.5	44.8	0.7	30	72	1.30 (17.7)	±15	±50	125 (200)	69 (31.2)
		31.0 - 31.3		45.0		0.7	30	72	1.40 (15.6)				

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

31.0-31.8 GHz (WR28/R320)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-310	0.3	31.0 - 31.8	36.8	36.9	37.0	2.3	30	62	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-310	0.6	31.0 - 31.8	42.0	42.2	42.4	1.4	32	68	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)

* : 1.15 (23.1) available on request

37.0-40.0 GHz (WR28/R320)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-370A	0.3	37.0 - 40.0	39.2	39.5	39.8	1.7	30	60	1.20 (20.8)*	±10	±25	155 (250)	18 (8.2)
VHP2-370A	0.6	37.0 - 40.0	44.0	44.3	44.6	1.0	32	65	1.20 (20.8)*	±10	±25	155 (250)	29.7 (13.5)
VHPX1-370	0.3	37.0 - 40.0	38.6	39.0	39.4	1.7	30	60	1.25 (19.1)**	±10	±25	155 (250)	18 (8.2)
VHPX2-370	0.6	37.0 - 40.0	44.0	44.3	44.6	1.0	32	65	1.25 (19.1)**	±10	±25	155 (250)	29.7 (13.5)
VHLP200-370	0.2	37.0 - 39.5	34.1	34.5	34.9	2.6	30	60	1.30 (17.7)	±7.5	±15	155 (250)	9.9 (4.5)
VHLP1-370	0.3	37.0 - 40.0	39.4	39.7	40.0	1.3	30	60	1.30 (17.7)	±10	±25	155 (250)	15 (6.8)
VHLP2-370	0.6	37.0 - 40.0	44.2	44.5	44.8	0.8	30	63	1.30 (17.7)	±10	±25	155 (250)	21.6 (9.8)
VFP150-370	0.15	37.0-40.0	30.5	30.5	30.0	3.0	33	49	1.5 (14)	±7.5	±15	155 (250)	2.2 (1.0)

* : 1.15 (23.1) available on request

** : 1.20 (20.8) available on request

49.2-50.2 GHz (WR19/R500)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-490	0.3	49.2 - 50.2	41.3	41.4	41.5	1.3	30	60	1.30 (17.7)	±10	±25	155 (250)	18 (8.2)

54.25-57.2 GHz (WR19/R500)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation n	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-540	0.3	54.25 - 57.2	42.2	42.4	42.6	1.2	30	61	1.30 (17.7)	±10	±25	155 (250)	18 (8.2)

57.2-58.2 GHz (WR19/R500)

Antenna	dia (m)	Freq (GHz)	Gain (dBi) Bot	Mid	Top	3dB BW (degs)	XPD (dB)	F/B (dB)	VSWR (R.L., dB)	Fine Degrees Azimuth	Adjustment Elevation	Survival Wind Speed mph (km/h)	Net Weight (lb (kg)
VHP1-570	0.3	57.2 - 58.2	42.6	42.7	42.8	1.1	30	62	1.30 (17.7)	±10	±25	155 (250)	18 (8.2)

The pre-assembly option is only applicable to 0.8m, 1.2m and 1.8m antennas. This applies to both standard profile and low profile antennas.

5.925-6.425 GHz (WR137/R70)

Antenna	ETSI Compliance	FCC Compliance
VP4-59	ETS 300833 R1 C1	
VP6-59	ETS 300833 R1 C1	FCC Part 101 Cat B
VHP4-59	ETS 300833 R1 C2	

5.925-7.125 GHz (WR137/R70)

Antenna	ETSI Compliance	FCC Compliance
VP4-59W	ETS 300833 R1 C1	
VP6-59W	ETS 300833 R1 C	FCC Part 101 Cat B
VHP4-59W	ETS 300833 R1 C2	

5.925-7.125 GHz (WR137/R70)

Antenna	ETSI Compliance	FCC Compliance
VP4-64	ETS 300833 R1 C1	
VP6-64	ETS 300833 R1 C1	FCC Part 101 Cat B
VPX4-64	ETS 300833 R1 C1	
VHP4-64	ETS 300833 R1 C2	
VHPX4-64	ETS 300833 R1 C3	

7.125-7.75 GHz (WR112/R84)

Antenna	ETSI Compliance	FCC Compliance
VP4-71	ETS 300833 R1 C1	
VP6-71	ETS 300833 R1 C1	
VHP2-71	ETS 300833 R1 C2	
VHP4-71	ETS 300833 R1 C2	
VHP6-71	ETS 300833 R1 C3	
VHPX2-71	ETS 300833 R1 C2	
VHPX4-71	ETS 300833 R1 C2	
VHPX6-71	ETS 300833 R1 C3	

* : 1.10 (26.4) available on request
** : 1.25 (19.1) available on request

7.125-8.5 GHz (WR112/R84)

Antenna	ETSI Compliance	FCC Compliance
VP4-71W	ETS 300833 R1 C1	
VP6-71W	ETS 300833 R1 C1	
VHP2-71W	ETS 300833 R1 C2	
VHP4-71W	ETS 300833 R1 C2	
VHP4-71WA	ETS 300833 R1 C2	
VHP6-71W	ETS 300833 R1 C3	
VHPX2-71W	ETS 300833 R1 C2	
VHPX4-71W	ETS 300833 R1 C2	
VHPX6-71W	ETS 300833 R1 C3	
VHLP2-71W	ETSI 300833 R1 C3	
VHLP4-71W	ETSI 300833 R1 C3	
VP4-71W-N	ETS 300833 R1 C1	
VP6-71W-N	ETS 300833 R1 C1	
VHP2-71W-N	ETS 300833 R1 C2	
VHP4-71W-N	ETS 300833 R1 C2	
VHP6-71W-N	ETS 300833 R1 C3	

7.425-7.9 GHz (WR112/R84)

Antenna	ETSI Compliance	FCC Compliance
VP4A-74	ETS 300833 R1 C1	
VHP2-74	ETS 300833 R1 C2	
VHP4-74	ETS 300833 R1 C3	
VHP6-74	ETS 300833 R1 C3	
VHPX2A-74	ETS 300833 R1 C2	
VHPX4A-74	ETS 300833 R1 C2	
VHPX6A-74	ETS 300833 R1 C3	

* : 1.10 (26.4) available on request
** : 1.25 (19.1) available on request

7.75-8.5 GHz (WR112/R84)

Antenna	ETSI Compliance	FCC Compliance
VP4-77	ETS 300833 R1 C1	
VP6-77	ETS 300833 R1 C1	
VHP2-77	ETS 300833 R1 C2	
VHP4-77	ETS 300833 R1 C2	
VHP6-77	ETS 300833 R1 C3	
VHPX2-77	ETS 300833 R1 C2	
VHPX4-77	ETS 300833 R1 C2	
VHPX6-77	ETS 300833 R1 C3	

* : 1.10 (26.4) available on request
** : 1.25 (19.1) available on request

10.5-10.7 GHz (WR90/R100)

Antenna	ETSI Compliance	FCC Compliance
VHP2-105	ETS 300833 R1 C2	
VHP4-105	ETS 300833 R1 C2	FCC Part 101, Cat B
VHP6-105	ETS 300833 R1 C2	FCC Part 101, Cat A
VHLP2-105	ETS 300833 R1 C3	
VHLP4-105	ETS 300833 R1 C3	FCC PART 101,Cat A

* : 1.15 (23.1) available on request

10.7-11.7 GHz (WR90/R100)

Antenna	ETSI Compliance	FCC Compliance
VHP2-107	ETS 300833 R1 C2	
VHP4-107	ETS 300833 R1 C2	FCC Part 101, Cat B
VHP6-107	ETS 300833 R1 C2	FCC Part 101, Cat A
VHLP2-107	ETS 300833 R1 C3	
VHLP4-107	ETS 300833 R1 C3	FCC PART 101,Cat A

* : 1.15 (23.1) available on request

11.7-12.2 GHz (WR75/R120)

Antenna	ETSI Compliance	FCC Compliance
VHP2-117	ETS 300833 R1 C3	
VHP4-117	ETS 300833 R1 C2	

* : 1.15 (23.1) available on request

12.7-13.25 GHz (WR75/R120)

Antenna	ETSI Compliance	FCC Compliance
VP4A-130	ETS 300833 R1 C1	
VP6A-130	ETS 300833 R1 C1	
VHP1-130	ETS 300833 R1 C3	
VHP2-130	ETS 300833 R1 C3	
VHP2.5-130	ETS 300833 R1 C3	
VHP4-130	ETS 300833 R1 C2	FCC Part 101, Cat B
VHP6-130	ETS 300833 R1 C3	FCC Part 101, Cat A
VHPX2-130	ETS 300833 R1 C3	
VHPX2.5-130	ETS 300833 R1 C3	
VHPX4-130	ETS 300833 R1 C3	FCC Part 101, Cat B
VHPX6-130	ETS 300833 R1 C3	FCC Part 101, Cat A
VHLP1-130	ETS 300833 R1 C2	
VHLP2-130	ETS 300833 R1 C3	
VHLP2.5-130	ETS 300833 R1 C3	
VHLP4-130	ETS 300833 R1 C3	FCC Part 101, Cat B

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

14.25-15.35 GHz (WR62/R140)

Antenna	ETSI Compliance	FCC Compliance
VP4A-142	ETS 300833 R2 C1	
VHP1-142	ETS 300833 R2 C1	
VHP2-142	ETS 300833 R2 C2	
VHP2.5-142	ETS 300833 R2 C2	
VHP4-142	ETS 300833 R2 C2	
VHP6-142	ETS 300833 R2 C2	
VHPX2-142	ETS 300833 R2 C2	
VHPX2.5-142	ETS 300833 R2 C2	
VHPX4-142	ETS 300833 R2 C2	
VHPX6-142	ETS 300833 R2 C2	
VHLP1-142	ETS 300833 R2 C2	
VHLP2-142	ETS 300833 R2 C3	
VHLP2.5-142	ETS 300833 R2 C3	
VHLP4-142	ETS 300833 R2 C3	

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

17.3-17.7 GHz (WR51/R180)

Antenna	ETSI Compliance	FCC Compliance
VP4-173	ETS 300833 R2 C1	
VP6-173	ETS 300833 R2 C1	
VHP1-173	ETS 300833 R2 C2	
VHP2-173	ETS 300833 R2 C2	

* : 1.15 (23.1) available on request

17.7-19.7 GHz (WR42/R220)

Antenna	ETSI Compliance	FCC Compliance
VP4-180A	ETS 300833 R2 C1	FCC Part 101, Cat B
VP6-180A	ETS 300833 R2 C1	FCC Part 101, Cat B
VHP1-180	ETS 300833 R2 C2	
VHP2-180B	ETS 300833 R2 C2	FCC Part 101, Cat A
VHP2.5-180	ETS 300833 R2 C2	FCC Part 101, Cat A
VHP4-180A	ETS 300833 R2 C2	FCC Part 101, Cat A
VHP6-180A	ETS 300833 R2 C2	FCC Part 101, Cat A
VHPX1-180	ETS 300833 R2 C2	
VHPX2-180A	ETS 300833 R2 C2	FCC Part 101, Cat A
VHPX2.5-180	ETS 300833 R2 C2	FCC Part 101, Cat A
VHPX4-180A	ETS 300833 R2 C2	FCC Part 101, Cat A
VHPX6-180A	ETS 300833 R2 C2	FCC Part 101, Cat A
VHLP1-180	ETS 300833 R2 C2	
VHLP2-180	ETS 300833 R2 C3	FCC Part 101, Cat A
VHLP2.5-180	ETS 300833 R2 C3	FCC Part 101, Cat A
VHLP4-180	ETS 300833 R2 C3	FCC Part 101, Cat A
VHLPX2-180	ETS 300833 R2 C3	FCC Part 101, Cat A

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

21.2-23.6 GHz (WR42/R220)

Antenna	ETSI Compliance	FCC Compliance
VP4A-220	ETS 300833 R3 C1	FCC Part 101, Cat B
VHP1-220	ETS 300833 R3 C3	
VHP2-220A	ETS 300833 R3 C3	FCC Part 101, Cat A
VHP2.5-220	ETS 300833 R3 C3	FCC Part 101, Cat A
VHP4-220A	ETS 300833 R3 C3	FCC Part 101, Cat A
VHP6-220A	ETS 300833 R3 C3	FCC Part 101, Cat A
VHPX1-220	ETS 300833 R3 C3	
VHPX2-220A	ETS 300833 R3 C3	FCC Part 101, Cat A
VHPX2.5-220	ETS 300833 R3 C3	FCC Part 101, Cat A
VHPX4-220A	ETS 300833 R3 C3	FCC Part 101, Cat A
VHPX6-220A	ETS 300833 R3 C3	FCC Part 101, Cat A
VHLP200-220	ETS 300833 R3 C2	
VHLP1-220	ETS 300833 R3 C3	
VHLP2-220	ETS 300833 R3 C3	FCC Part 101, Cat A
VHLP2.5-220	ETS 300833 R3 C3	FCC Part 101, Cat A
VHLP4-220	ETS 300833 R3 C3	FCC Part 101, Cat A
VFP1-220	ETS 300833 R3 C3	

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

24.25-26.5 GHz (WR42/R220)

Antenna	ETSI Compliance	FCC Compliance
VHP1-240A	ETS 300833 R4 C2	
VHP2-240A	ETS 300833 R4 C2	FCC Part 101, Cat B
VHP2.5-240	ETS 300833 R4 C2	FCC Part 101, Cat A
VHP4-240	ETS 300833 R4 C2	FCC Part 101, Cat A
VHPX1-240A	ETS 300833 R4 C2	
VHPX2-240A	ETS 300833 R4 C2	FCC Part 101, Cat A
VHPX2.5-240	ETS 300833 R4 C2	FCC Part 101, Cat A
VHPX4-240	ETS 300833 R4 C2	FCC Part 101, Cat A
VHLP200-240	ETS 300833 R4 C2	
VHLP1-240	ETS 300833 R4 C2	
VHLP2-240	ETS 300833 R4 C2	FCC Part 101, Cat A
VHLP2.5-240	ETS 300833 R4 C2	FCC Part 101, Cat A
VHLP4-240	ETS 300833 R4 C2	FCC Part 101, Cat A

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

24.25-27.5 GHz Wideband (WR42/R220)

Antenna	ETSI Compliance	FCC Compliance
VHLP1-240W	ETS 300833 R4 C1	
VHLP2-240W	ETS 300833 R4 C1	

24.25-29.5 GHz Wideband (WR34/R260)

Antenna	ETSI Compliance	FCC Compliance
VHP1-240W	ETS 300833 R4 C2	
VHP2-240W	ETS 300833 R4 C2	

27.5-29.5 GHz (WR28/R320)

Antenna	ETSI Compliance	FCC Compliance
VHP1-275	ETS 300833 R4 C2	
VHP2-275	ETS 300833 R4 C2	
VHLP1-275	ETS 300833 R4 C2	
VHLP2-275	ETS 300833 R4 C2	

* : 1.15 (23.1) available on request

27.5-31.3 GHz Wideband (WR28/R320)

Antenna	ETSI Compliance	FCC Compliance
VHPX1-275W		
VHPX2-275W		
VHLP1A-275W	ETS 300833 R4 C1	
	ETS 300833 R5 C2	
VHLP2A-275W	ETS 300833 R4 C1	
	ETS 300833 R5 C1	FCC Part 101, Cat A
VHLP2.5A-275W	ETS 300833 R4 C2	
	ETS 300833 R5 C2	FCC Part 101, Cat A

31.0-31.8 GHz (WR28/R320)

Antenna	ETSI Compliance	FCC Compliance
VHP1-310	ETS 300833 R5 C2	
VHP2-310	ETS 300833 R5 C2	FCC Part 101, Cat B

* : 1.15 (23.1) available on request

37.0-40.0 GHz (WR28/R320)

Antenna	ETSI Compliance	FCC Compliance
VHP1-370A	FCC Part 101, Cat A	
VHP2-370A	FCC Part 101, Cat A	
VHPX1-370	FCC Part 101, Cat A	
VHPX2-370	FCC Part 101, Cat A	
VHLP200-370		
VHLP1-370	FCC Part 101, Cat A	
VHLP2-370	FCC Part 101, Cat A	

* : 1.15 (23.1) available on request
** : 1.20 (20.8) available on request

49.2-50.2GHz (WR19/R500)

Antenna	ETSI Compliance	FCC Compliance
VHP1-490	ETS 300833 R6 C2	

54.25-57.2 GHz (WR19/R500)

Antenna	ETSI Compliance	FCC Compliance
VHP1-540	ETS 300833 R6 C2	FCC Part 101, Cat B

57.2-58.2 GHz (WR19/R500)

Antenna	ETSI Compliance	FCC Compliance
VHP1-570	ETS 300833 R6 C2	FCC Part 101, Cat B

Valuline® Antenna Mechanical Specifications

All ValuLine antennas include a vertical tower mount. Standard mounting information is shown below. Dimensional information and illustrations for installation are shown on pages 22-32.

ValuLine Antenna Standard Mounting Information

Mounting Pipe
Vertical tower mounts attach to a tower supported vertical pipe of the diameter specified in the table below. The mounting pipe is not included with the antenna. It is normally purchased as part of the tower.

Mount Construction
Structural members are hot-dip galvanized steel or aluminum.

Hardware
Fixed hardware is hot-dip galvanized steel. Adjusting hardware, including adjusting rods, is stainless steel.

Azimuth and Elevation Adjustments
The adjustment ranges are indicated in the table below. Some mounts, as noted in the table, use a swivel clamp for azimuth adjustment. Adjustment range for these is 360 degrees. All ValuLine antenna mounts have threaded fine elevation adjustment.

Side Struts
Some ValuLine antennas include a side strut. The side strut includes a stainless steel threaded rod fine azimuth adjustment. See page 123 in the Andrew Catalog 38 for information about side strut positioning.

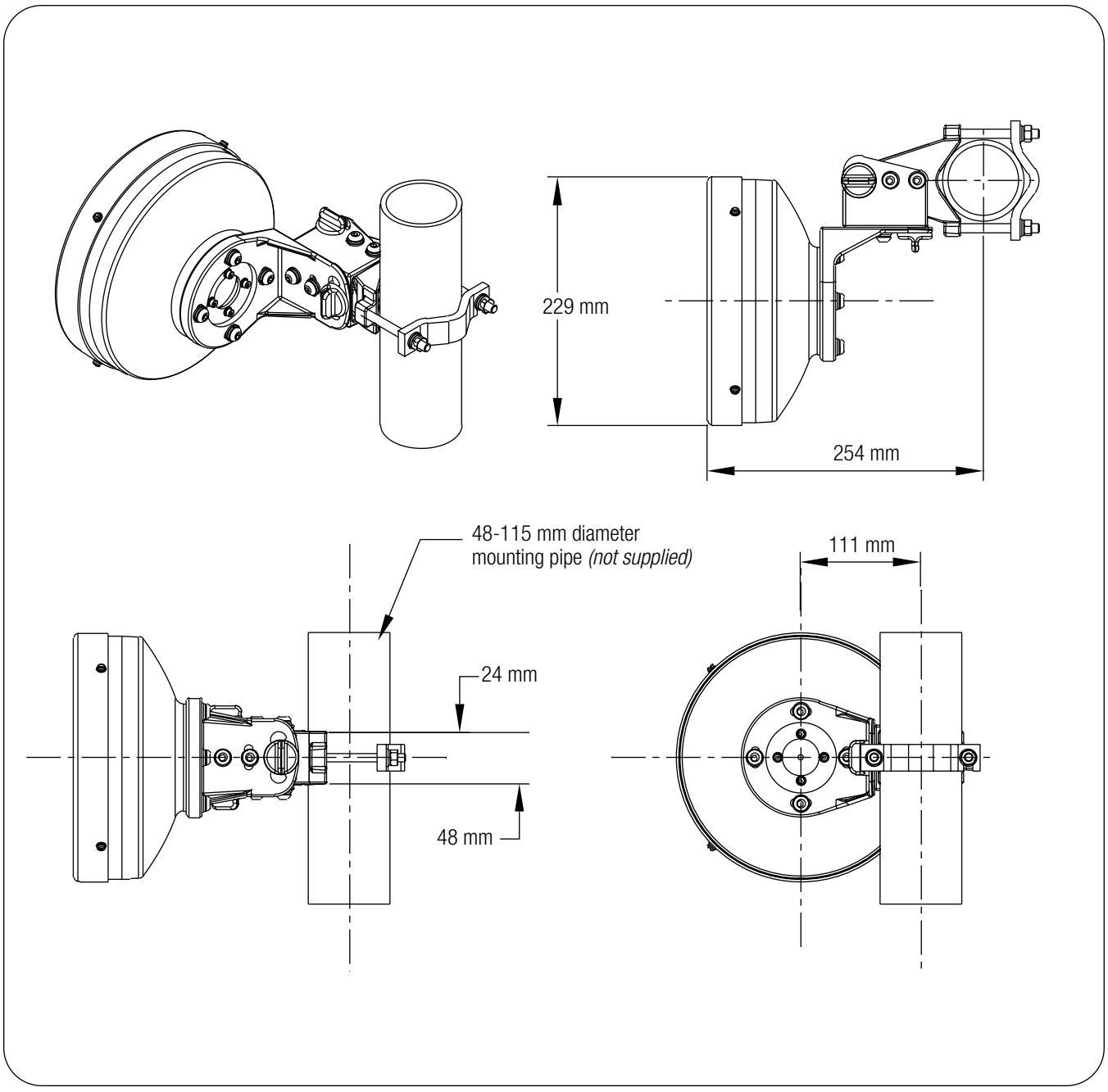
Vertical Tower Mounts

Antenna Size ft (m)	Replacement Mount Type Number Metric Standard Hardware	Mounting Pipe Dia. in (mm)	Center Offset* in (mm)	Fine Azimuth Adjustment Degrees	Fine Elevation Adjustment Degrees	Side Struts Included
1 (0.3)	**Integral**	1.9-4.5 (48-115)	10.9 (278)	± 15° ±10	± 50° ±25	–
2 (0.6)	**Integral**	1.9-4.5 (48-115)	11.5 (292)	± 15° ±10	± 50° ±25	–
2.5 (0.8)	**Integral**	2.5-4.5 (65-115)	12.4 (315)	± 15° ±10	± 50° ±25	–
4 (1.2)	**Integral**	4.5 (115)	10.4 (264)	± 15° ±10	± 20° ±25	1
6 (1.8)	**46770A-3**	4.5 (115)	5.4 (137)	± 15° ±10	± 5° ±25	–

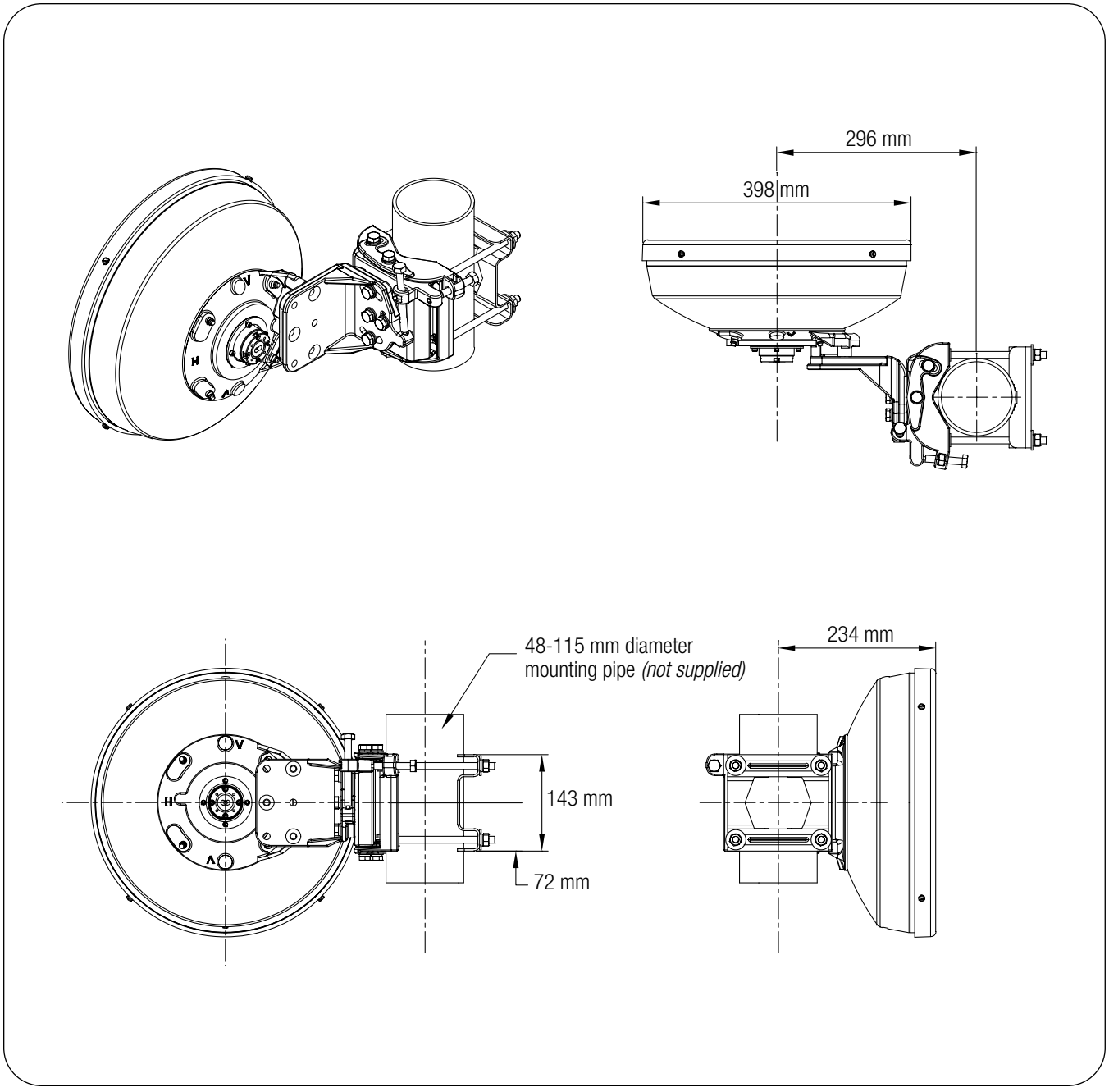
** With respect to the mounting pipe viewed from the rear of the antenna. Can be reversed by inverting the mount or antenna.*
Note: *Integral mounts consist of multiple type numbers. Contact Andrew for type numbers.*

Valuline® Antenna Dimensional Information and Illustrations for Installation

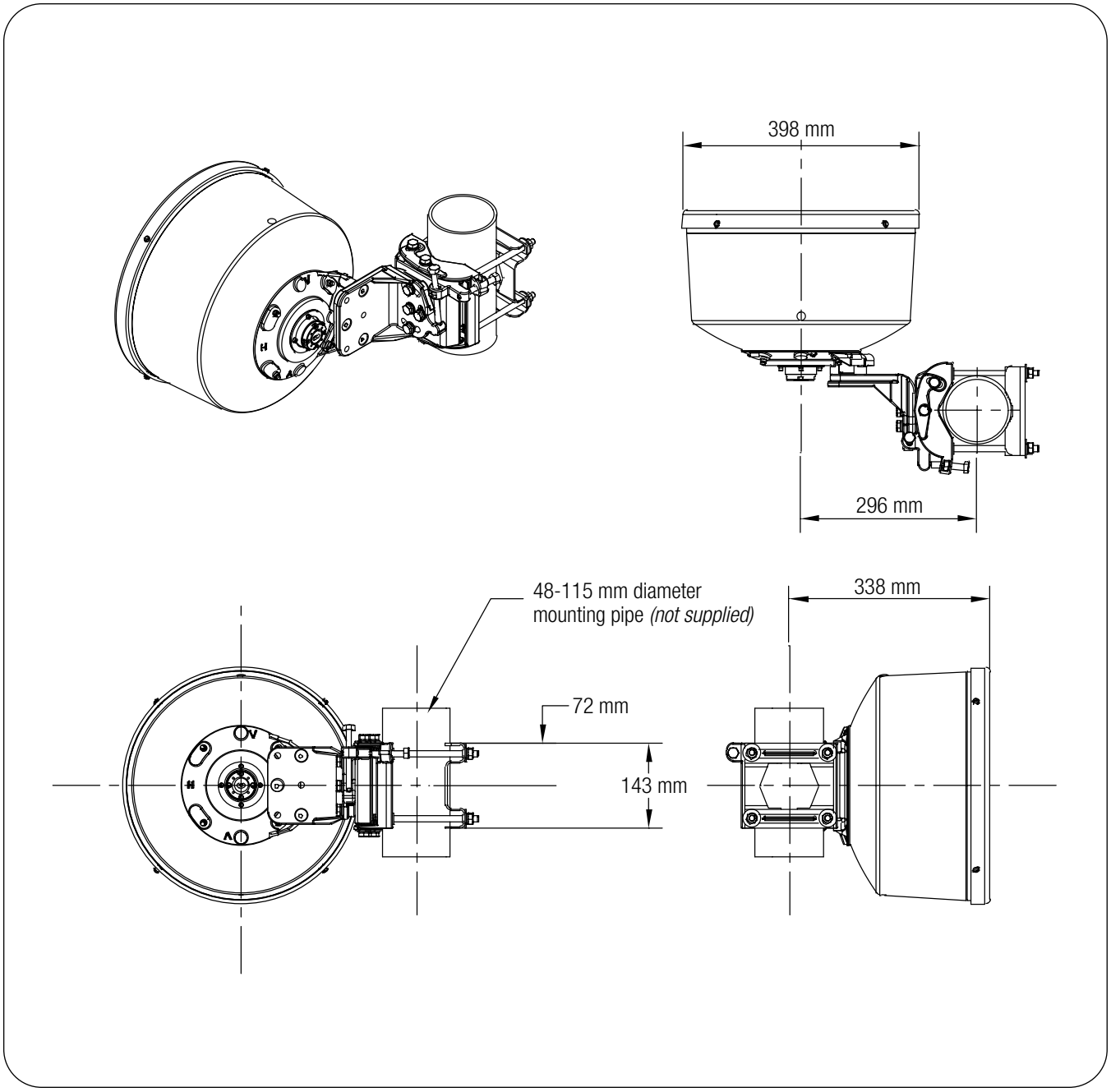
VHLP200 - 8 inch Valuline Low Profile Antenna Dimensions



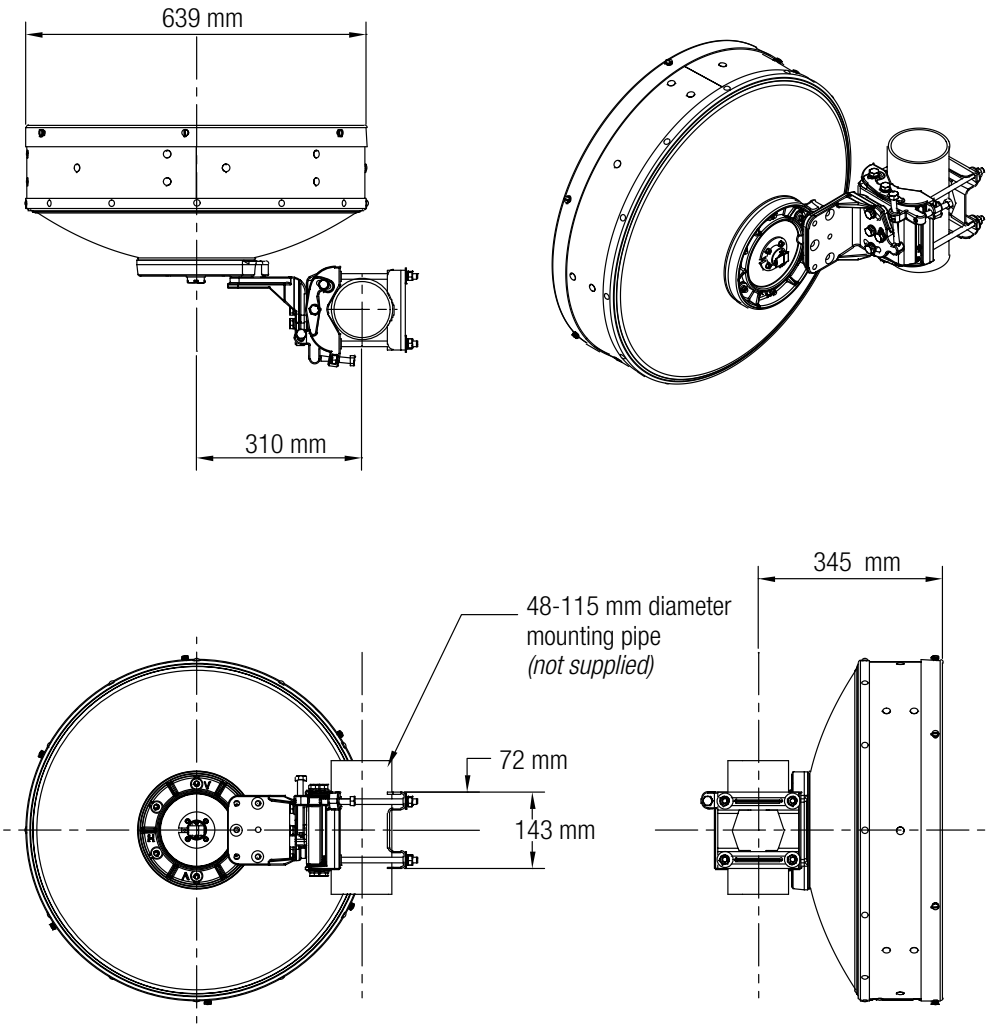
VHLP1 - 1 ft Valuline® Low Profile Antenna Dimensions



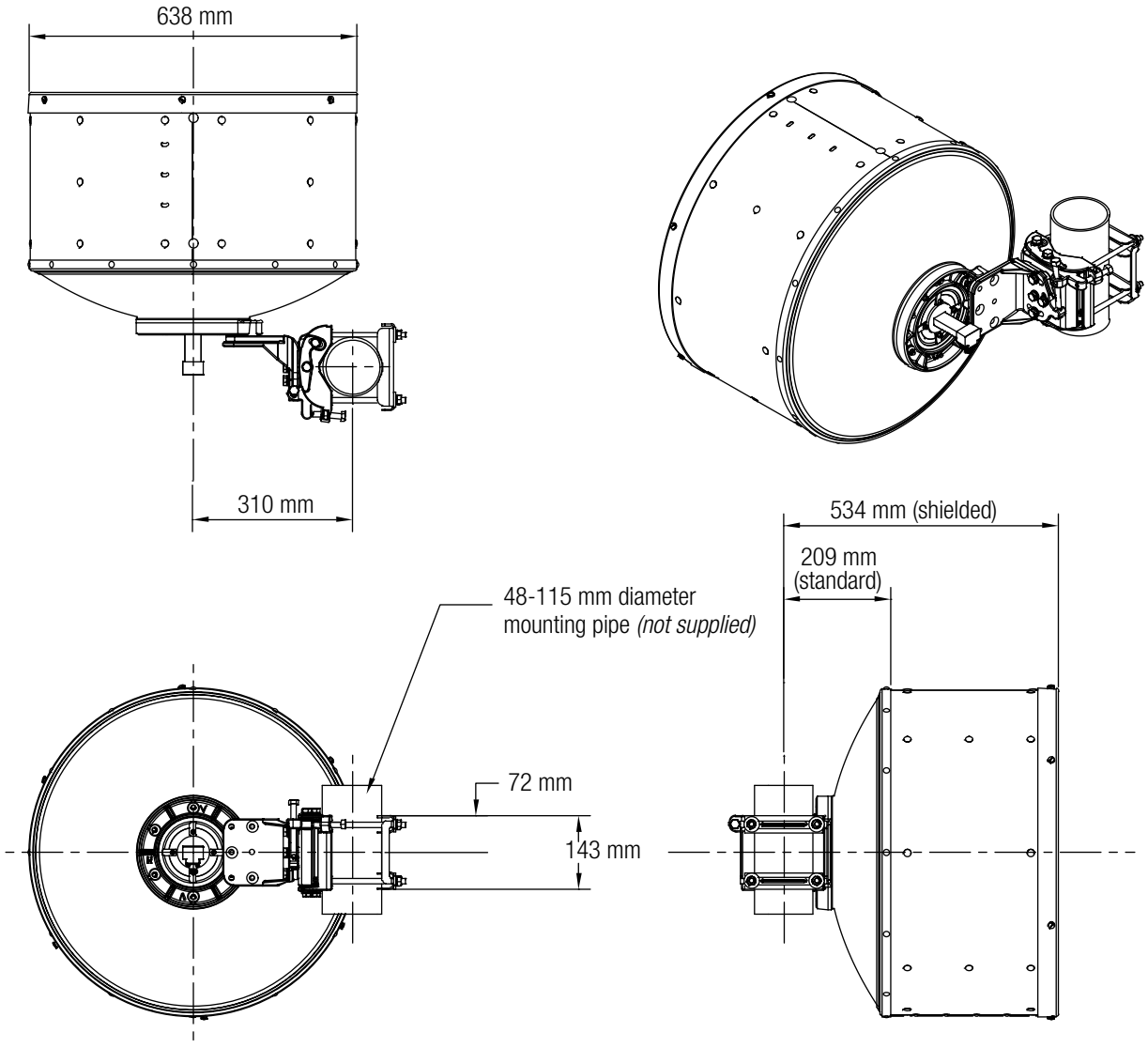
VHP1 - 1 ft Valuline® Antenna Dimensions



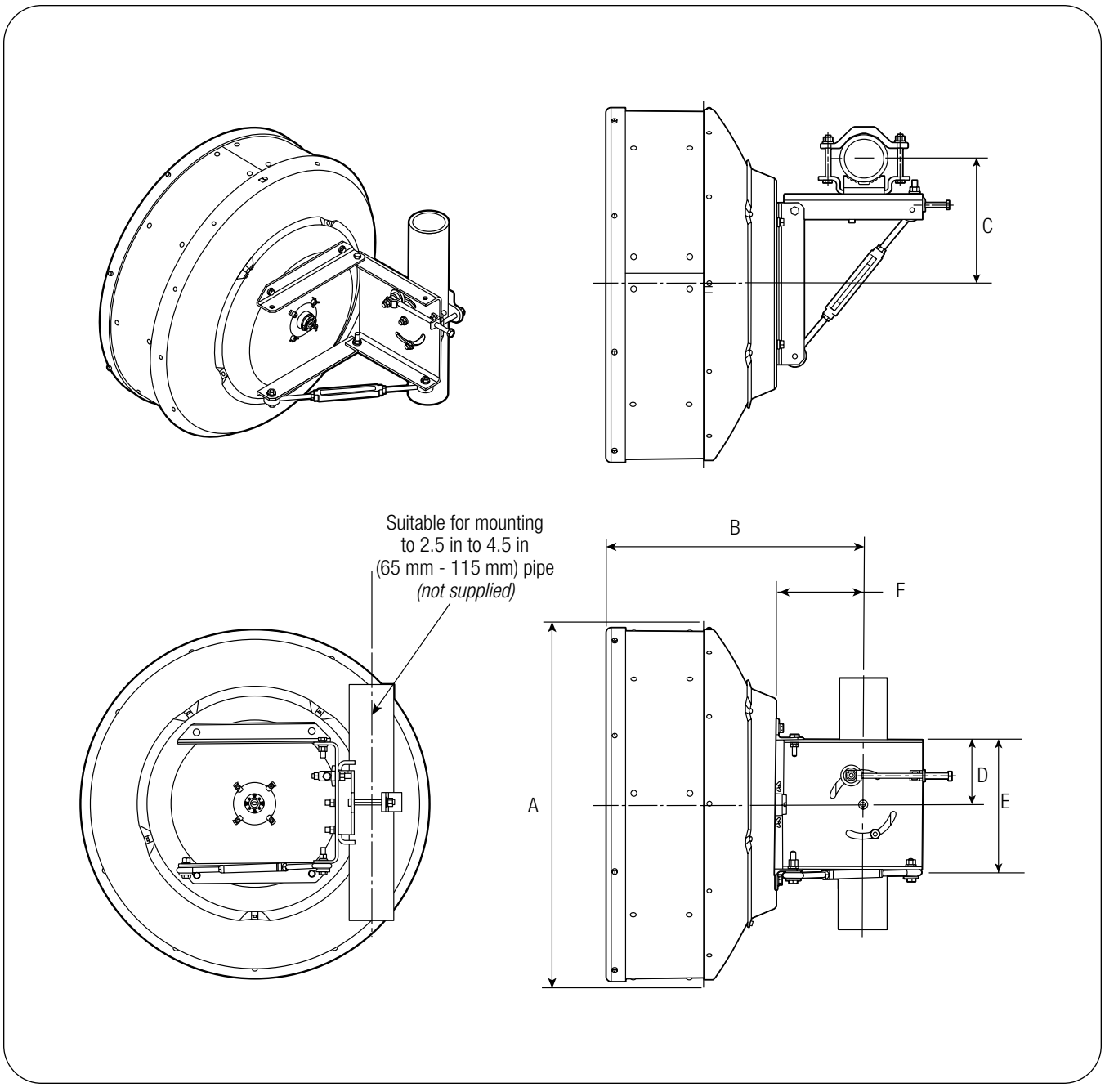
VHLP2 - 2 ft Valuline® Low Profile Antenna Dimensions



VHP2 - 2 ft Valuline® Standard and Shielded Antenna Dimensions



VHLP2.5 - 2.5 ft Valuline® Low Profile Antenna Dimensions

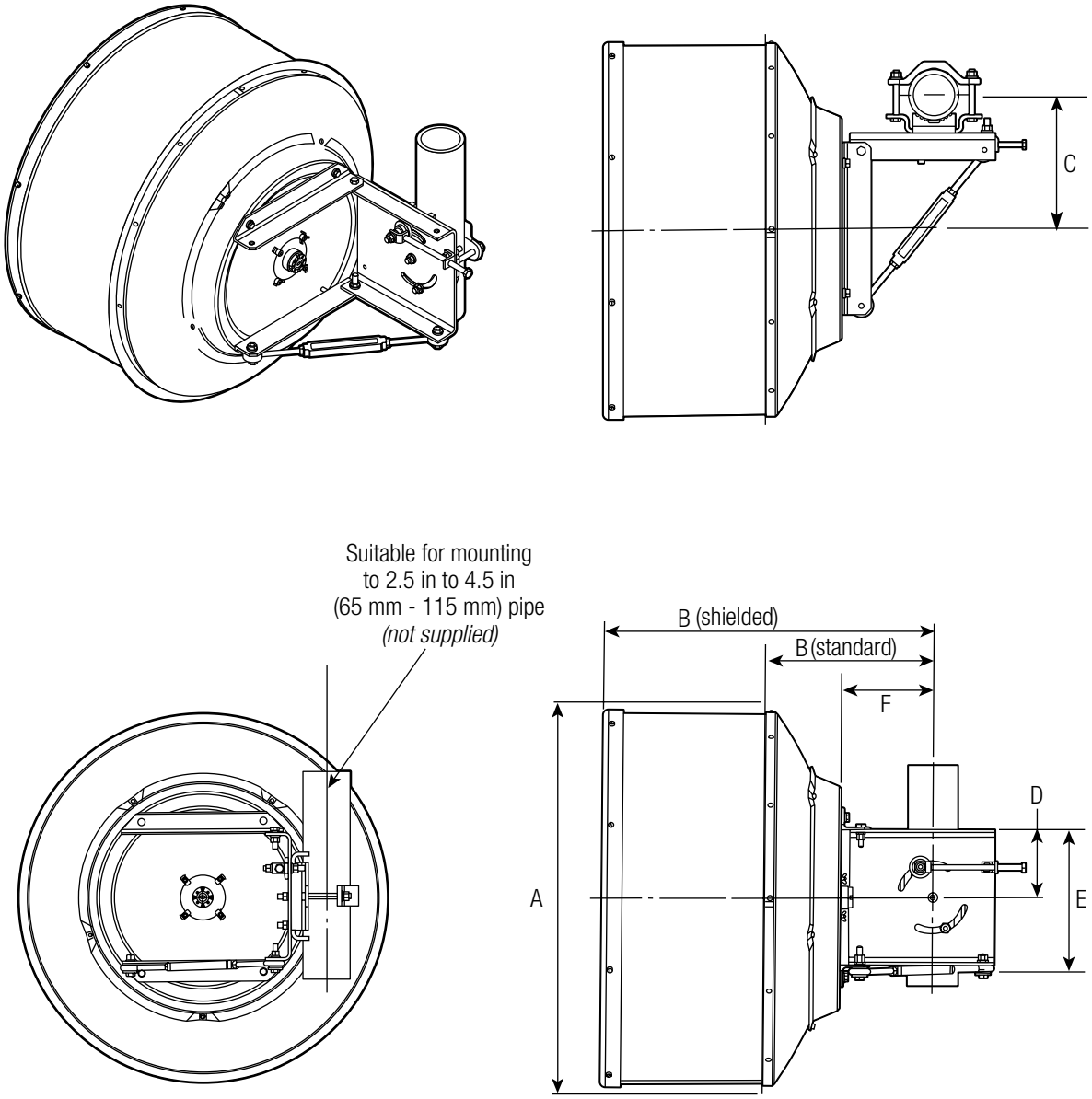


Dimensions in Inches (mm)

Antenna Size, ft (m)	A	B	C	D	E	F
2.5 (0.8)	35 (889)	24.5 (622)	11.9 (301)	6 (153)	13.3 (338)	8.2 (208)

All dimensions based on 4.5 in (115 mm) pipe.

VP2.5 and VHP2.5 - 2.5 ft Valuline® Standard and Shielded Antenna Dimensions

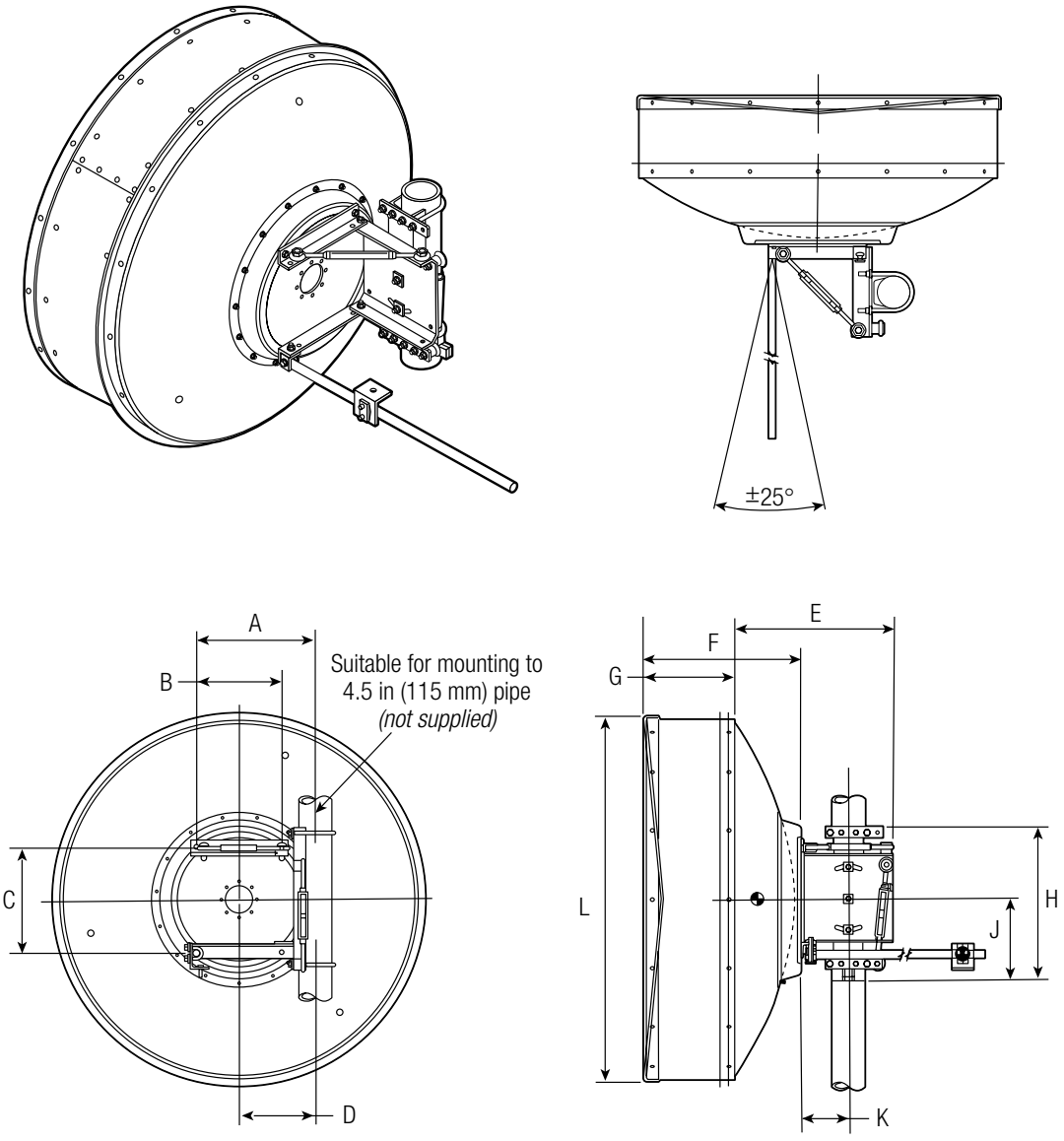


Dimensions in Inches (mm)

Antenna Size, ft (m)	A	B	C	D	E	F
2.5 (0.8) Shielded	35 (889)	29.6 (752)	11.9 (301)	6 (153)	13.3 (338)	8.2 (208)
2.5 (0.8) Standard	35 (889)	15.2 (385)	11.9 (301)	6 (153)	13.3 (338)	8.2 (208)

All dimensions based on 4.5 in (115 mm) pipe.

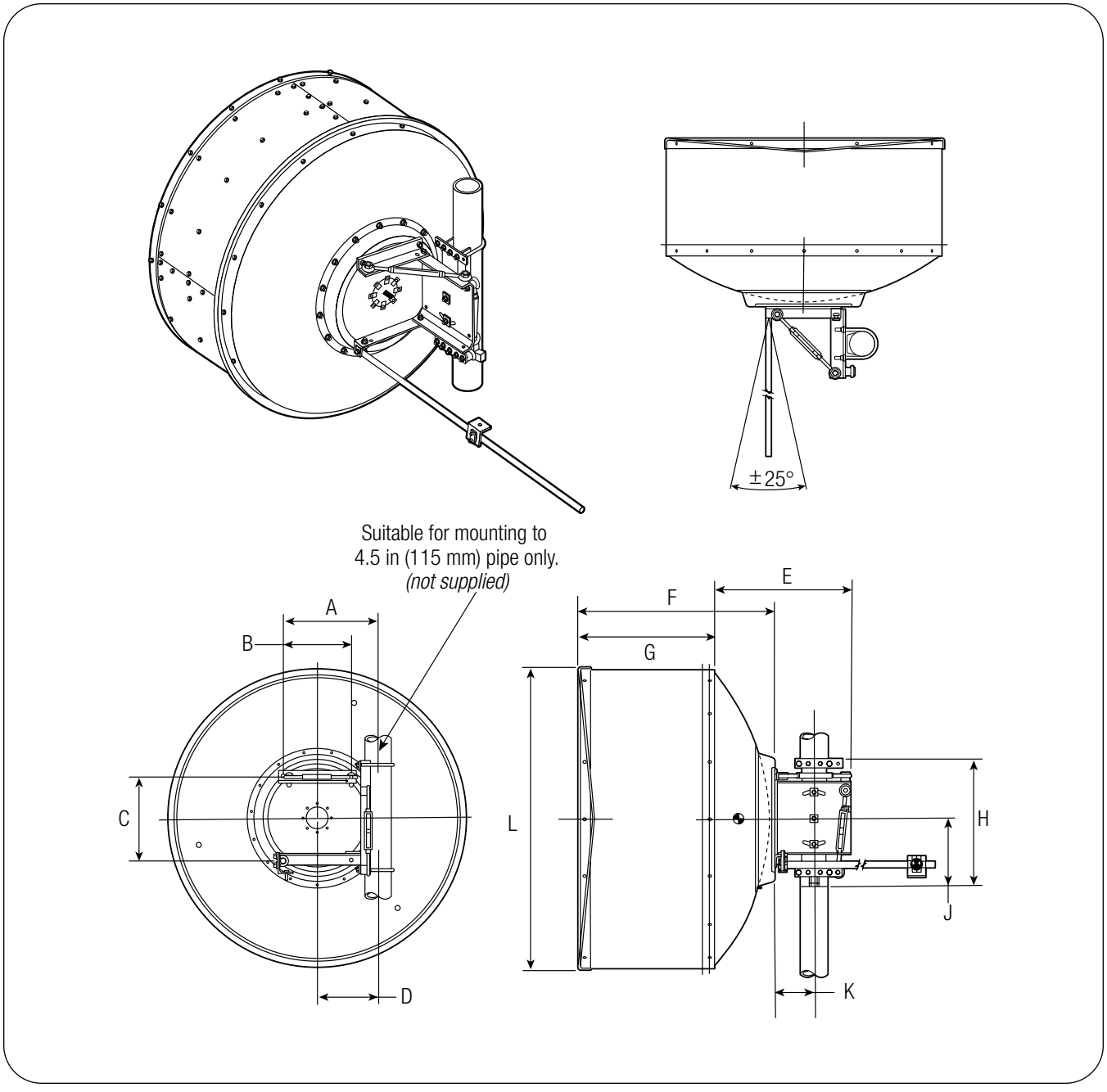
VHLP4 - 4 ft Valuline® Low Profile Antenna Dimensions



Dimensions in Inches (mm)

Antenna Size, ft (m)	A	B	C	D	E	F	G
4 (1.2)	16.2 (411)	11.6 (295)	14.2 (361)	10.4 (264)	21.4 (544)	23.4 (594)	14.7 (373)
	H	**J**	**K**	**L**			
	20.8 (528)	11.1 (288)	6.5 (165)	49.1 (1247)			

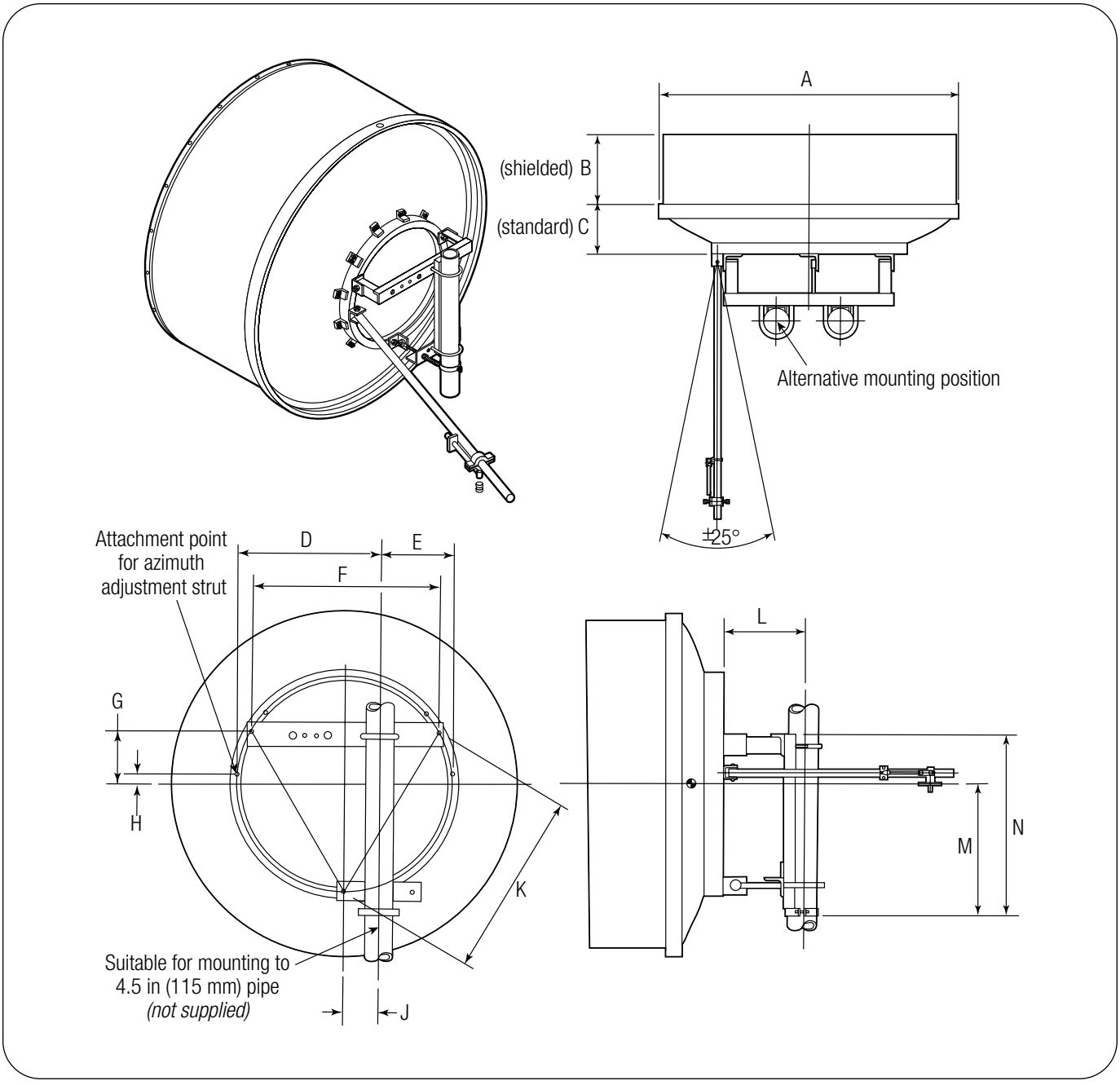
VP4 and VHP4 - 4 ft Valuline® Standard and Shielded Antenna Dimensions



Dimensions in Inches (mm)

Antenna Size, ft (m)	A	B	C	D	E	F	G
4 (1.2)	16.2 (411)	11.6 (295)	14.2 (361)	10.4 (264)	21.4 (544)	23.4 (594)	14.7 (373)
	H	**J**	**K**	**L**			
	20.8 (528)	11.1 (288)	6.5 (165)	49.1 (1247)			

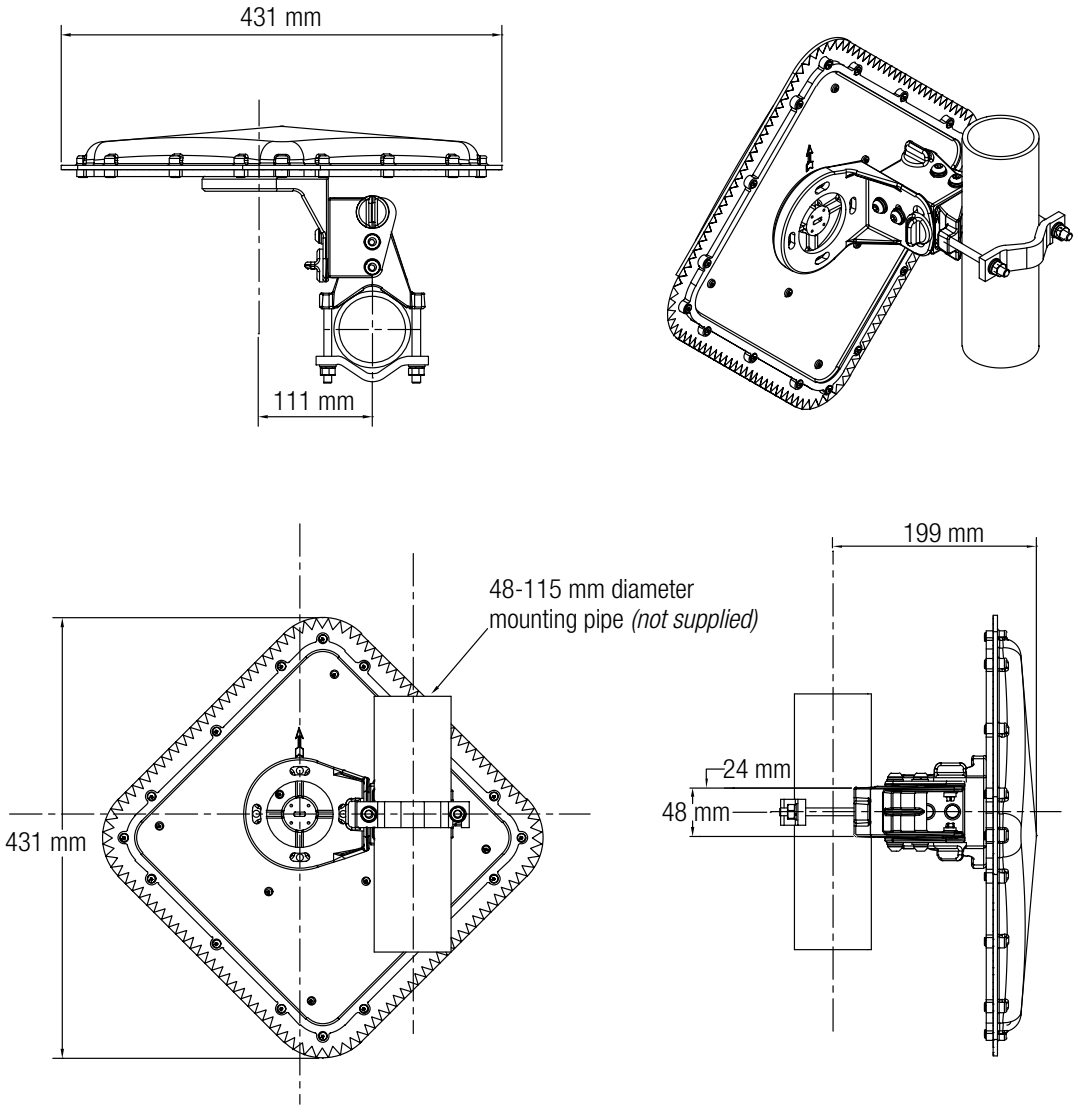
VP6 and VHP6 - 6 ft Valuline® Standard and Shielded Antenna Dimensions



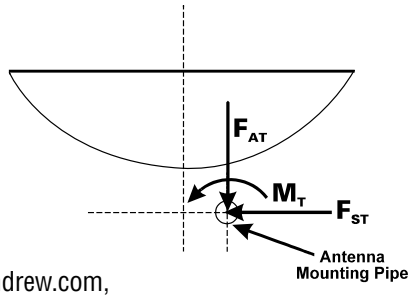
Dimensions in Inches (mm)

Antenna Size, ft (m)	A	B	C	D	E	F	G
6 (1.8)	76.5 (1945)	34.7 (881)	12.75 (325)	18.8 (476)	9.7 (246)	26.5 (675)	7.65 (195)
	H	**J**	**K**	**L**	**M**	**N**	
	2.25 (60)	5.4 (137)	26.5 (675)	11.75 (300)	19.1 (488)	29.1 (740)	

VFP1 - 1 ft Valuline® Flat Panel Antenna



Forces and Twisting Moments Due to Wind Loads



The axial, side, and twisting moment forces shown below are maximum values exerted on a supporting structure. They are the result of wind from the most critical direction for each parameter. The individual maximums may not occur simultaneously.

Andrew Software, included on the Powertools™ CD-ROM and downloadable from www.andrew.com, calculates the forces produced by winds from any angle.

See page 44 in the Andrew Catalog 38 for more information.

Forces and Twisting Moments Due to Wind Loads

Forces/ Moments	Wind Speed 70 mph 110 km/h 31 m/s	125 mph 200 km/h 56 m/s	150 mph 250 km/h 69 m/s
1 ft (0.3 m) VHLP, VHLPX			
F_{AT} max., lb (N)	23 (102)	75 (334)	108 (481)
F_{ST} max., lb (N)	9 (41)	30 (135)	44 (194)
M_T max., lb-ft (N•m)	18 (24)	58 (79)	84 (114)
1 ft (0.3 m) VHP, VHPX			
F_{AT} max., lb (N)	23 (102)	75 (334)	108 (481)
F_{ST} max., lb (N)	10 (46)	34 (150)	49 (216)
M_T max., lb-ft (N•m)	19 (26)	63 (85)	90 (122)
2 ft (0.6 m) VHLP, VHLPX			
F_{AT} max., lb (N)	51 (226)	166 (740)	240 (1066)
F_{ST} max., lb (N)	27 (121)	89 (394)	127 (567)
M_T max., lb-ft (N•m)	44 (60)	145 (196)	208 (282)
2 ft (0.6 m) VHP, VHPX			
F_{AT} max., lb (N)	51 (226)	166 (740)	240 (1066)
F_{ST} max., lb (N)	32 (141)	103 (460)	149 (662)
M_T max., lb-ft (N•m)	60 (81)	195 (264)	280 (380)
2.5 ft (0.8 m) VP, VPX			
F_{AT} max., lb (N)	103 (459)	337 (1501)	–
F_{ST} max., lb (N)	28 (125)	92 (410)	–
M_T max., lb-ft (N•m)	105 (143)	345 (468)	–
2.5 ft (0.8 m) VP, VPX with Molded Radome			
F_{AT} max., lb (N)	52 (231)	170 (754)	–
F_{ST} max., lb (N)	32 (142)	104 (464)	–
M_T max., lb-ft (N•m)	49 (66)	160 (217)	–
2.5 ft (0.8 m) VHLP, VHLPX			
F_{AT} max., lb (N)	76 (337)	248 (1102)	–
F_{ST} max., lb (N)	34 (150)	110 (491)	–
M_T max., lb-ft (N•m)	70 (95)	229 (311)	–

Forces/ Moments	Wind Speed 70 mph 110 km/h 31 m/s	125 mph 200 km/h 56 m/s	150 mph 250 km/h 69 m/s
2.5 ft (0.8 m) VHP, VHPX			
F_{AT} max., lb (N)	76 (337)	248 (1102)	–
F_{ST} max., lb (N)	38 (167)	123 (546)	–
M_T max., lb-ft (N•m)	78 (106)	255 (346)	–
4 ft (1.2 m) VP, VPX			
F_{AT} max., lb (N)	264 (1176)	864 (3843)	–
F_{ST} max., lb (N)	72 (321)	236 (1049)	–
M_T max., lb-ft (N•m)	194 (263)	633 (858)	–
4 ft (1.2 m) VP, VPX with Molded Radome			
F_{AT} max., lb (N)	133 (591)	434 (1930)	–
F_{ST} max., lb (N)	77 (342)	251 (1118)	–
M_T max., lb-ft (N•m)	175 (237)	571 (774)	–
4 ft (1.2 m) VHLP, VHLPX			
F_{AT} max., lb (N)	194 (863)	634 (2821)	–
F_{ST} max., lb (N)	86 (383)	281 (1251)	–
M_T max., lb-ft (N•m)	181 (245)	590 (800)	–
4 ft (1.2 m) VHP, VHPX			
F_{AT} max., lb (N)	194 (863)	634 (2821)	–
F_{ST} max., lb (N)	96 (428)	314 (1398)	–
M_T max., lb-ft (N•m)	202 (274)	659 (894)	–
6 ft (1.8 m) VP, VPX			
F_{AT} max., lb (N)	595 (2646)	1944 (8647)	–
F_{ST} max., lb (N)	162 (722)	531 (2360)	–
M_T max., lb-ft (N•m)	547 (742)	1789 (2425)	–
6 ft (1.8 m) VP, VPX with Molded Radome			
F_{AT} max., lb (N)	299 (1329)	976 (4343)	–
F_{ST} max., lb (N)	184 (818)	601 (2673)	–
M_T max., lb-ft (N•m)	521 (707)	1703 (2309)	–
6 ft (1.8 m) VHP, VHPX			
F_{AT} max., lb (N)	437 (1942)	1427 (6348)	–
F_{ST} max., lb (N)	216 (962)	707 (3144)	–
M_T max., lb-ft (N•m)	499 (676)	1629 (2209)	–

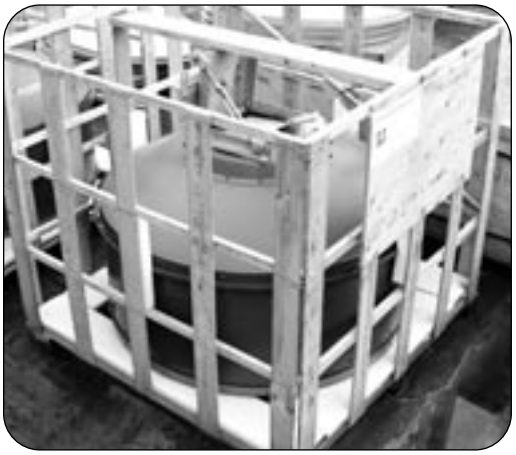
Valuline® Antenna Packaging

1 ft (0.3 m), 2 ft (0.6 m), and 2.5 ft (0.8 m) ValuLine® antennas are shipped as standard in totally recyclable cardboard packaging. 4 ft (1.2 m) and 6 ft (1.8 m) antennas are supplied in wire-bound crates. For shipment to more remote areas of the world, heavy duty packing is available.

Contact Andrew for details.

Standard VHP1 and VHP2 Packing

Standard VHP4 Packing



Pre-Assembled VHP4 Packing

	Length, cm (in)	Width, cm (in)	Height, cm (in)	Gross, kg (lb)	Net (lb (kg)	Volume, m^3 (ft^3)
VHLP1	64.5 (25.4)	46 (18.1)	28.5 (11.2)	7.93 (17.4)	6.5 (14.3)	0.08 (2.83)
VHP1	64.5 (25.4)	46 (18.1)	39 (15.4)	9.8 (21.6)	7.7 (17.0)	0.12 (4.24)
VHLP2	70 (27.6)	70 (27.6)	55 (21.7)	13.7 (30)	11.3 (25)	0.27 (9.53)
VHP2	70 (27.6)	70 (27.6)	73.5 (28.9	17.4 (38)	15 (33)	0.36 (12.7)
VP2.5	102 (40)	102 (40)	92 (36.2)	37.3 (82)	29 (64)	0.96 (33.9)
VHLP2.5	102 (40)	102 (40)	92 (36.2)	40.9 (90)	31.2 (69)	0.96 (33.9)
VHP2.5	102 (40)	102 (40)	92 (36.2)	43.8 (96)	35.5 (78)	0.96 (33.9)
VP4	134 (53)	134 (53)	71 (28)	116 (255)	36 (79)	1.28 (45.2)
VHLP4	134 (53)	134 (53)	71 (28)	132 (290)	52 (114)	1.28 (45.2)
VHP4	134 (53)	134 (53)	71 (28)	137 (301)	57 (157)	1.28 (45.2)
VP6	208 (82)	78.7 (31)	213.4 (84)	223 (491)	72.5 (159)	3.49 (123.2)
VHP6	208 (82)	90 (35)	213.4 (84)	308 (674)	157.5 (347)	4 (141.2)

ValuLine® Low Profile Antenna Specification Sheets

Please note that only the most common flange options have been given. Other options may be available on request.
Contact ValuLine product line management for details.
This document should be used to assist in the specification of the third field of VHLP low profile antenna part numbers.
Example : VHLP2-130-XYZ where :

Option "X" represents the feed flange and VSWR requirement.
Option "Y" represents the antenna and radome color and logo requirement.
Option "Z" represents the antenna packing requirement.

e.g. A customer requires a VHLP2-130 antenna with the following characteristics :

PBR120 Flange, 1.30 VSWR, Grey Antenna, White Radome with Flash, Standard Pack

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	WR75	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR120	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR120	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			5	UNPAINTED	WHITE	FLASH	5	PRE-ASSY STANDARD PACK
			6	UNPAINTED	WHITE	LESS FLASH	6	-
			A	GREY	GREY	LESS FLASH	7	PRE-ASSY HEAVY DUTY PACK

Therefore: The antenna part no. is VHLP2-130-211

-105 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG40B/U	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR100	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR100	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

-107 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG40B/U	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR100	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR100	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

* :- Note : Radome color option applies to VHP and VHPX antennas only.

-130 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	WR75	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR120	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR120	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

-142 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG541A/U	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR140	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR140	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

-180 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG595/U MOD	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR220	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR220	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

-220 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR**	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG595/U MOD	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR220	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR220	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

** :- VSWR for VHLP200-220 is 1.40

* :- Note : Radome color option applies to VHP and VHPX antennas only.

-240 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR**	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG595/U MOD	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR220	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR220	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

** :- VSWR for VHLP200-240, VHLP1-240W and VHLP2-240W is 1.40

-275 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG599/U MOD	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR320	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR320	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

-370 Series

Part Number Option codes : VHLP Antennas

Option	Feed Flange	VSWR	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG599/U MOD	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR320	1.30	2	GREY	WHITE	LESS FLASH	2	-
9	UBR320	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
			4	WHITE	WHITE	LESS FLASH	4	-
			A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
							6	-
							7	PRE-ASSY HEAVY DUTY PACK

ValuLine® Standard and High Performance Antennas

Please note that only the most common flange options have been given. Other options are available on request.
Contact ValuLine product line management for details.

This document should be used to assist in the specification of the third field of VP, VHP and VHPX antenna part numbers.
Example : VHP2-71-XYZ where :

Option "X" represents the feed flange and V.S.W.R. requirement.
Option "Y" represents the antenna and radome color and logo requirement.
Option "Z" represents the antenna packing requirement.

e.g. A customer requires a VHP2-71 antenna with the following characteristics :

PDR84 Flange, 1.15 VSWR, Grey Antenna, White Radome with Flash, Standard Pack

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR112G	1.15	1.20	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR84	1.15	1.20	2	GREY	WHITE	LESS FLASH	2	-
3	CPR112G	1.10	1.15	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR84	1.10	1.15	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR84	1.10	1.15	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR84	1.10	1.15					6	-
9	UBR84	1.15	1.20					7	PRE-ASSY HEAVY DUTY PACK
A	UBR84	1.10	1.15						

* :- Note : Radome color option applies to VHP and VHPX antennas only.

Therefore : The antenna part no. is VHP2-71-211

-71 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR112G	1.15	1.20	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR84	1.15	1.20	2	GREY	WHITE	LESS FLASH	2	-
3	CPR112G	1.10	1.15	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR84	1.10	1.15	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR84	1.15	1.20	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR84	1.10	1.15					6	-
9	UBR84	1.15	1.20					7	PRE-ASSY HEAVY DUTY PACK
A	UBR84	1.10	1.15						

-71W Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR112G	1.15	1.30	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR84	1.15	1.30	2	GREY	WHITE	LESS FLASH	2	-
5	PBR84	1.15	1.30	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
9	UBR84	1.15	1.30	4	WHITE	WHITE	LESS FLASH	4	-
				A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
								6	-
								7	PRE-ASSY HEAVY DUTY PACK

-74 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR112G	1.15	1.20	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR84	1.15	1.20	2	GREY	WHITE	LESS FLASH	2	-
3	CPR112G	1.10	1.15	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR84	1.10	1.15	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR84	1.15	1.20	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR84	1.10	1.15					6	-
9	UBR84	1.15	1.20					7	PRE-ASSY HEAVY DUTY PACK
A	UBR84	1.10	1.15						

-77 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR112G	1.15	1.20	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR84	1.15	1.20	2	GREY	WHITE	LESS FLASH	2	-
3	CPR112G	1.10	1.15	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR84	1.10	1.15	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR84	1.15	1.20	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR84	1.10	1.15					6	-
9	UBR84	1.15	1.20					7	PRE-ASSY HEAVY DUTY PACK
A	UBR84	1.10	1.15						

-102 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR90G	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR100	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	CPR90G	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR100	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR100	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR100	1.15	1.20					6	-
9	UBR100	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR100	1.15	1.20						

-105 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR90G	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR100	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	CPR90G	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR100	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR100	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR100	1.15	1.20					6	-
9	UBR100	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR100	1.15	1.20						

* :- Note : Radome color option applies to VHP and VHPX antennas only.

-107 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	CPR90G	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR100	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	CPR90G	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR100	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR100	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR100	1.15	1.20					6	-
9	UBR100	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR100	1.15	1.20						

-130 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	WR75	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PDR120	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	WR75	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PDR120	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PBR120	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PBR120	1.15	1.20					6	-
9	UBR120	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR120	1.15	1.20						

-142 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG541A/U	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR140	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	UG541A/U	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PBR140	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PDR140	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PDR140	1.15	1.20					6	-
7	UG541A/U MOD	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
8	UG541A/U MOD	1.15	1.20						
9	UBR140	1.20	1.25						
A	UBR140	1.15	1.20						

-173 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	-	-	-	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	-	-	-	2	GREY	WHITE	LESS FLASH	2	-
3	-	-	-	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	-	-	-	4	WHITE	WHITE	LESS FLASH	4	-
5	PDR180	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PDR180	1.15	1.20					6	-
7	UDR180	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
8	UDR180	1.15	1.20						
9	UBR180	1.20	1.25						
A	UBR180	1.15	1.20						

-180 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG595/U MOD	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR220	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	UG595/U MOD	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PBR220	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PDR220	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PDR220	1.15	1.20					6	-
9	UBR220	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR220	1.15	1.20						

-220 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG595/U MOD	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR220	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	UG595/U MOD	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PBR220	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PDR220	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PDR220	1.15	1.20					6	-
9	UBR220	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR220	1.15	1.20						

-240 Series

Part Number Option codes : VP, VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG595/U MOD	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR220	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	UG595/U MOD	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PBR220	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	PDR220	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	PDR220	1.15	1.20					6	-
9	UBR220	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR220	1.15	1.20						

-275 Series

Part Number Option codes : VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG599/U MOD	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR320	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	UG599/U MOD	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PBR320	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	WR28 COVER	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	WR28 COVER	1.15	1.20					6	-
9	UBR320	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR320	1.15	1.20						

-370 Series

Part Number Option codes : VHP & VHPX Antennas

Option	Feed Flange	VSWR (S.P.)	VSWR (D.P.)	Option	Antenna Color	Radome Color *	Logo	Option	Packing
1	UG599/U MOD	1.20	1.25	1	GREY	WHITE	FLASH	1	STANDARD PACK
2	PBR320	1.20	1.25	2	GREY	WHITE	LESS FLASH	2	-
3	UG599/U MOD	1.15	1.20	3	WHITE	WHITE	FLASH	3	HEAVY DUTY PACK
4	PBR320	1.15	1.20	4	WHITE	WHITE	LESS FLASH	4	-
5	WR28 COVER	1.20	1.25	A	GREY	GREY	LESS FLASH	5	PRE-ASSY STANDARD PACK
6	WR28 COVER	1.15	1.20					6	-
9	UBR320	1.20	1.25					7	PRE-ASSY HEAVY DUTY PACK
A	UBR320	1.15	1.20						

* :- Note : Radome color option applies to VHP and VHPX antennas only.

Andrew Corporation

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