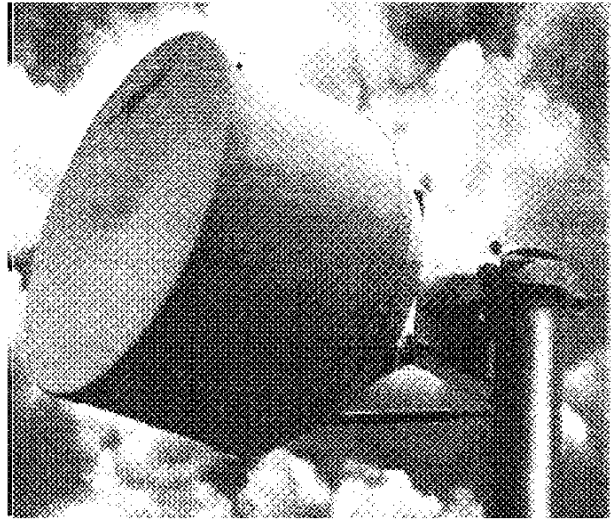


# ValuLine Antenna Specifications

## 23 GHz Frequency Band

### General Description

ValuLine® Antennas provide a cost-effective solution for contemporary terrestrial microwave communications. They are available in standard unshielded (VP Series) high performance shielded (VHP Series), and dual polarized (VHPX Series) versions in all the popular frequency bands. The antennas have a watertight pressurizable feed system or can be integrated directly to radio systems. ValuLine antennas satisfy the widely accepted EIA 195C and 222E standards for electrical, mechanical and structural characteristics and are backed by a three year warranty. Both antenna and radome are paintable to match local surroundings.



For applications assistance please contact the Andrew Customer Support Center

United States: TOLL FREE: 1-800-255-1479 Telephone: (708) 349-3300  
Fax: (708) 349-5943

United Kingdom: TOLL FREE: 0800-250055 Telephone: 011 44 592 780-551  
Fax: 011 44 592 792-380

### 0.6m (2ft) Diameter Antenna

#### 21.2 - 23.6 GHz Electrical Characteristics

Antenna Type	VP2-220	VHP2-220A	VHPX2-220A
Gain (dBi)			
Bottom	39.8	39.6	39.4
Middle	40.3	40.1	39.9
Top	40.7	40.5	40.3
3 dB Beamwidth (Degrees)	1.6	1.6	1.6
Cross Polarization Discrimination (dB)	32	32	32
F/B Ratio (dB)	54	66	66
VSWR (R.L., dB)	1.20 (20.8)*	1.20 (20.8)*	1.25 (19.1)**
Complies with U.K. RA Performance Specifications	MPT 1409 Part 3, Fig. 3.1	MPT 1409 Part 3, Fig. 3.2	MPT 1409 Part 3, Fig. 3.2
BZT Approval	-	BAPT 211 ZV 02/23 GHz Class B	-
ETSI Approval	ETS 300198 Fig. 4	ETS 300198 Fig. 4	ETS 300198 Fig. 4
FCC Category Part 94	B	A	A
RPE Number	3954	3955	3958

### Antenna Weight and Shipping Volume

Weight, kg (lbs)	29 (64)	34 (75)
Dimensions L x W x H, mm (in)	762 x 762 x 610 (30 x 30 x 24)	762 x 762 x 787 (30 x 30 x 31)

\*1.15 (23.1) Available on Request

\*\*1.20 (20.8) Available on Request

# Dimensions and Windloading Figures for VHP2 and VP2 Antennas

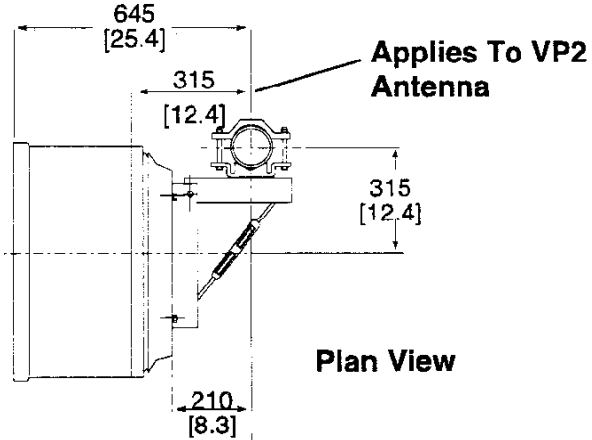
## Dimensional Specifications (All dimensions in mm [inches])

### Antenna Without Ice

	VHP2	VP2
Weight	31kg [68lb]	22.3kg [49lb]
Z <sub>CG</sub>	175[6.9]	88 [3.5]

### Antenna with 12mm [1/2"] Radial Ice

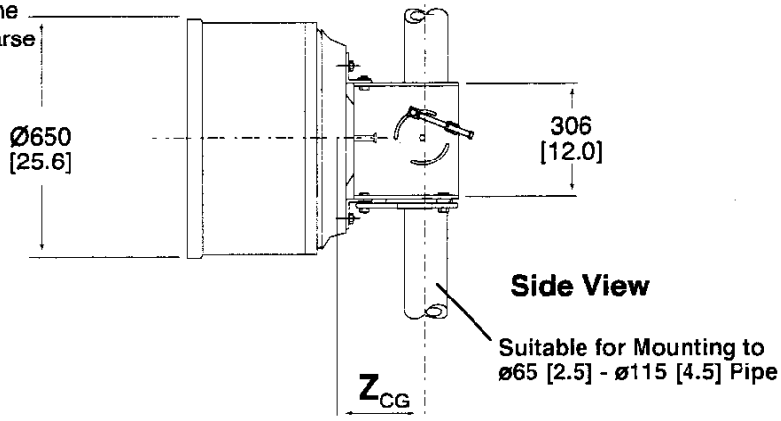
	VHP2	VP2
Weight	39kg [86lb]	24.3kg [54.4lb]
Z <sub>CG</sub>	215[8.5]	110[4.3]



Plan View

### Adjustment Ranges

Elevation	± 50° Fine
Azimuth	± 15° Fine 360° Coarse
Polarization	360°

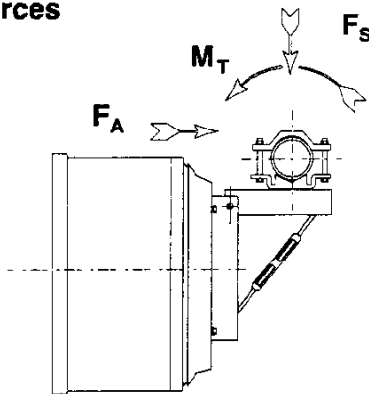


Side View

### Available Output Flange Types

UG595/U modified  
PBR220

## Wind Forces



Loading applied to tower by antenna at survival windspeed of 200 Km/h (125 mph) with 25mm [1"] radial ice.

	VHP2	VP2
F <sub>A</sub> max	1068 N [240 lbf]	1153 N [254 lbf]
F <sub>S</sub> max	-530 N [-119 lbf]	-308 N [-69 lbf]
M <sub>T</sub> max	-327 N-m [-243 ft-lb]	348 N-m [257 ft-lb]

These values are the maximums for each particular parameter and do not occur simultaneously.