

**PRODUCT  
SPECIFICATION**



# ValuLine® III Next Generation Antennas VHLP4

## SPECIFICATIONS

	VHLP4-7W	VHLP4-10W	VHLP4-11	VHLP4-13	VHLP4-15	VHLP4-18	VHLP4-23	VHLP4-26
Frequency Band, GHz	7.125-8.5	10.0-10.7	10.7-11.7	12.7-13.25	14.25-15.35	17.7-19.7	21.2-23.6	24.25-26.5
Bottom Band Gain, dBi	36.8	39.6	40.0	41.9	42.7	44.2	46.0	47
Mid Band Gain, dBi	37.3	40.0	40.4	42.0	42.9	44.7	46.7	47.4
Top Band Gain, dBi	37.7	40.4	40.8	42.1	43.1	45.1	47.0	47.8
Beamwidth, degrees	2.2	1.6	1.5	1.3	1.2	0.9	0.8	0.6
Front/Back, dB	63	66	67	68	71	72	74	75
XPD, dB	32	30	30	30	30	30	30	30
Return Loss, dB	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
Regulatory Compliance								
ETSI Class	R1 C3	R1 C3	R1 C3	R1 C3	R2 C3	R2 C3	R3 C3	R4 C3
FCC Part 101	N/A	Cat A	Cat A	Cat B	N/A	Cat A	Cat A	Cat A
Brazil Anatel	C2	C2	C2	C2	C2	C2	C2	C2
Canada SRSP	N/A	310.5	N/A	312.7B	314.5A	317.8A	321.8A	N/A
Andrew RPE Number	7079	7088	7043A	7049	7055	7061	7067	7073

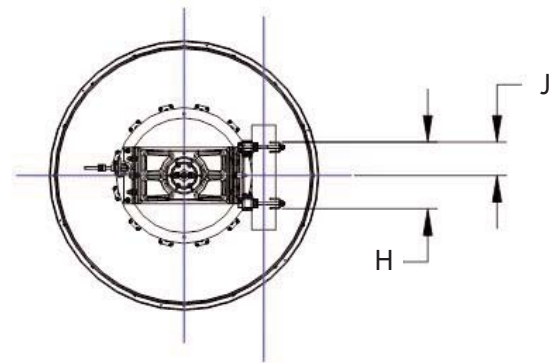
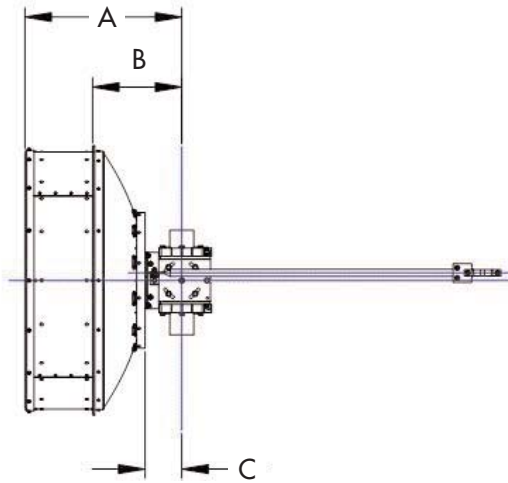
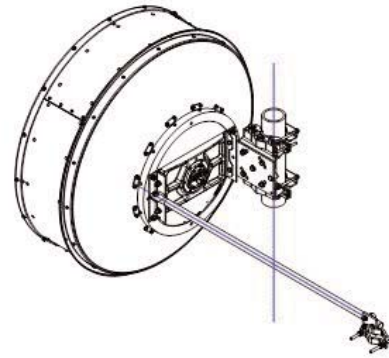
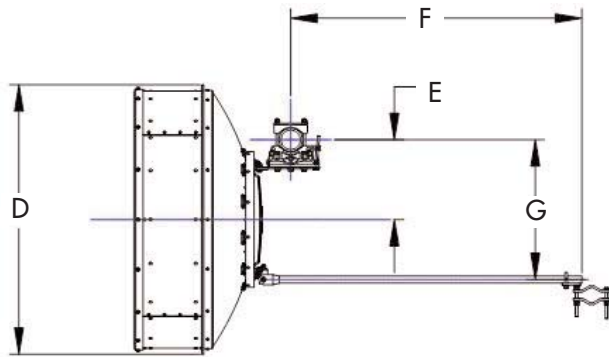
## VHLP4-7W SUB-BAND PERFORMANCE

Band	7.125-7.75	7.425-7.9	7.75-8.5
Bottom Band Gain, dBi	36.8	37.0	37.3
Mid Band Gain, dBi	37.0	37.2	37.5
Top Band Gain, dBi	37.3	37.3	37.7

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ValuLine® III Next Generation Antenna—VHLP4



**Antenna Dimensions, mm (in)**

A	751 (29.5)
B	427 (16.8)
C	176 (6.9)
D	1291 (50.8)
E	382 (15)
F	1395 (54.9)
G	670 (26.4)
H	320 (12.6)
J	160 (6.3)

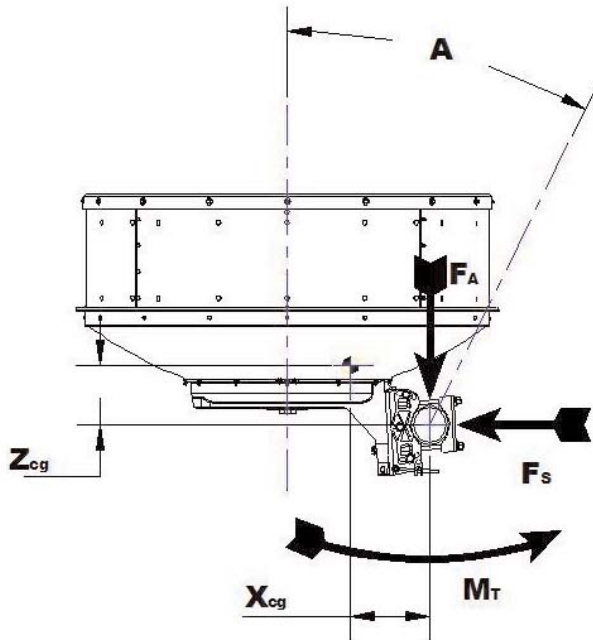
**Antenna Fine Adjustment**

Fine Aximuth	$\pm 12^\circ$
Fine Elevation	$\pm 15^\circ$

## ValuLine® III Next Generation Antenna—VHLP4

### Wind Loading

The axial, side, and twisting moment forces stated below are the maximum loads applied to the tower by the antenna at a survival windspeed of 250 km/h (155 mph). They are the result of wind from the most critical direction for each parameter. The individual maximums may not occur simultaneously. All forces are referenced to the antenna mounting pipe.



Axial force	$F_A$	3163 N
Side force	$F_S$	1567 N
Moment	$M_T$	1570 N·m
Angle A for $M_T$ maximum		-40°

Where side struts are fitted, the loads carried by the side struts are components of, not in addition to  $F_A$ ,  $F_S$ , and  $M_T$ .

$Z_{CG}^*$ Without Ice, mm (in)	170.6 (6.7)
$X_{CG}$ Without Ice, mm (in)	242.7 (9.5)

\* $Z_{CG}$  is the axial distance from the center of gravity to the mounting pipe.

### Antenna Weights Including Mount

Antenna Without Ice, kg (lb)	46 (101.4)
Antenna with 25 mm (1 in) Radial Ice, kg (lb)	115 (253.5)

### Antenna Packed Weights (Gross)

Weight, kg (lb)	102 (224.9)
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### Packed Antenna Dimensions (Single Unit Pack)

Dimensions, cm (in)	137 x 137 x 82 (54 x 54 x 323)
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Bulletin PA-100913.4-EN (10/07)

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