

LX6-6W-6GR

1.8m | 6ft ValuLine® Low Wind Load Antenna, dual-polarized, 5.925 – 7.125 GHz, grey, CPR137G flange



Product Classification

Product Type	Microwave antenna
Product Brand	ValuLine®

General Specifications

Antenna Type	LX - ValuLine® Low Wind Load Antenna, dual-polarized
Polarization	Dual
Antenna Input	CPR137G
Reflector Construction	One-piece reflector
Radome Color	Gray
Radome Material	Molded
Flash Included	Yes
Side Struts, Included	1
Side Struts, Optional	1

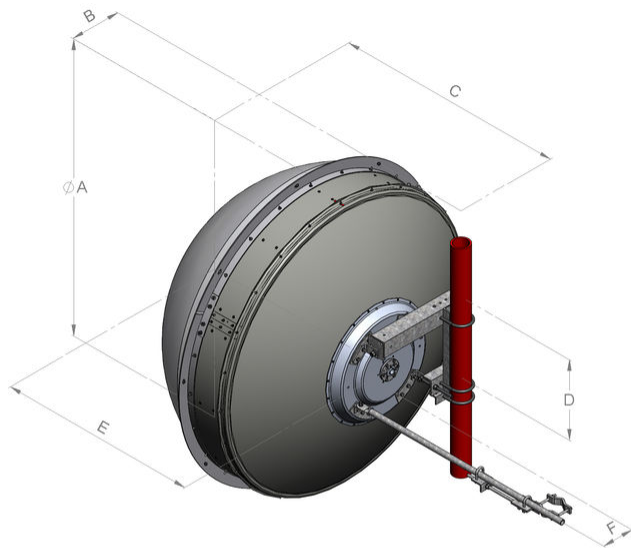
Dimensions

Diameter, nominal	1.8 m 6 ft
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LX6-6W-6GR

Antenna Dimensions and Mounting Information

HX6



Antenna size, ft (m)	Dimensions in inches (mm)					
	A	B	C	D	E	F
6 (1.8)	76.5 (1942)	13.4 (340)	60.0 (1523)	20.9 (530)	51.9 (1317)	8.4 (214)

Electrical Specifications

Operating Frequency Band	5.925 – 7.125 GHz
Gain, Low Band	37.6 dBi
Gain, Mid Band	38.1 dBi
Gain, Top Band	38.6 dBi
Boresite Cross Polarization Discrimination (XPD)	33 dB
Front-to-Back Ratio	60 dB
Beamwidth, Horizontal	1.9 °
Beamwidth, Vertical	1.9 °
Return Loss	23.9 dB

LX6-6W-6GR

VSWR	1.14
Radiation Pattern Envelope Reference (RPE)	7438
Electrical Compliance	IC 3059A IC 3064A US FCC Part 101A US FCC Part 74A

Electrical Specifications, Band 2

Beamwidth, Horizontal	2.1 °
Gain, Mid Band	37.8 dBi
Operating Frequency Band	5.725 – 5.850 GHz

Mechanical Specifications

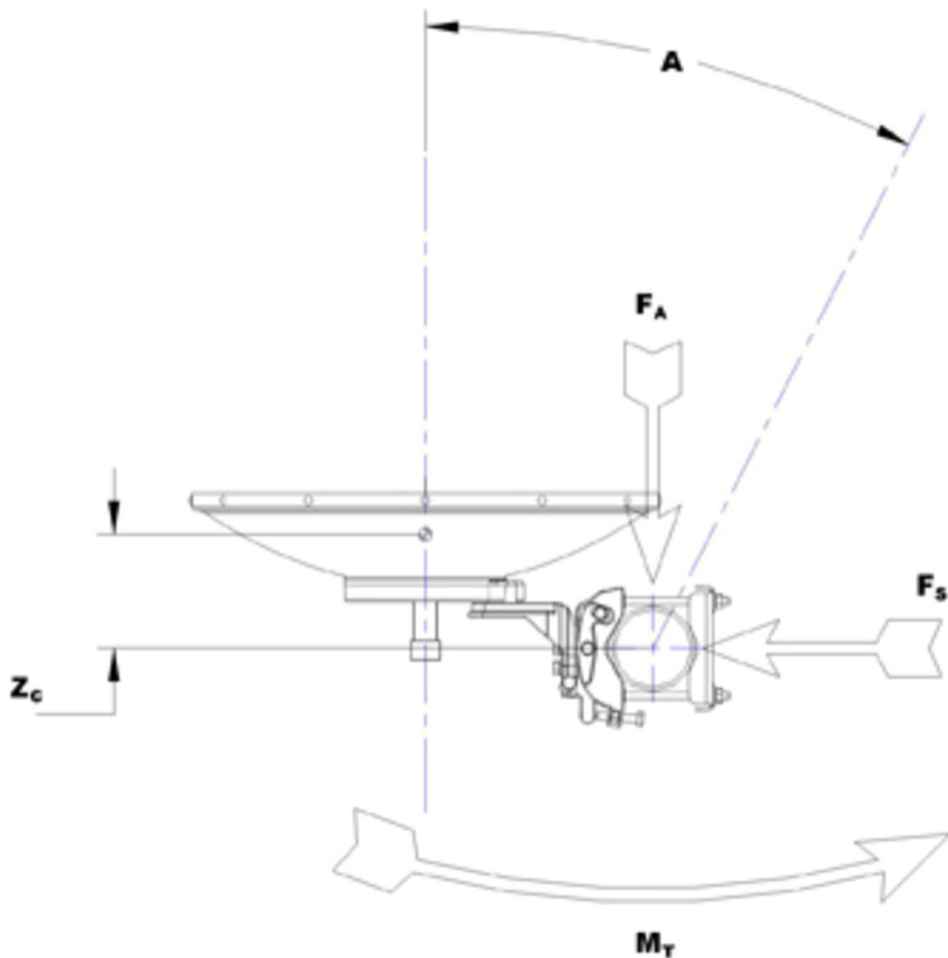
Compatible Mounting Pipe Diameter	115 mm 4.5 in
Fine Azimuth Adjustment Range	±5°
Fine Elevation Adjustment Range	±15°
Wind Speed, operational	180 km/h 111.847 mph
Wind Speed, survival	200 km/h 124.274 mph

Wind Forces at Wind Velocity Survival Rating

Axial Force (FA)	4670 N 1,049.858 lbf
Angle # for MT Max	-120 °
Side Force (FS)	2050 N 460.858 lbf
Twisting Moment (MT)	25003 N-m 221,295.203 in lb
Force on Inboard Strut Side	2900 N 651.946 lbf
Zcg without Ice	490 mm 19.291 in
Zcg with 1/2 in (12 mm) Radial Ice	540 mm 21.26 in
Weight with 1/2 in (12 mm) Radial Ice	191 kg 421.082 lb

LX6-6W-6GR

Wind Forces at Wind Velocity Survival Rating Image



Packaging and Weights

Height, packed	2150 mm 84.646 in
Width, packed	1225 mm 48.228 in
Length, packed	2070 mm 81.496 in
Packaging Type	Standard pack
Volume	5.5 m ³ 194.231 ft ³
Weight, gross	186 kg 410.059 lb
Weight, net	86 kg 189.597 lb

* Footnotes

LX6-6W-6GR

Axial Force (FA)	Maximum forces exerted on a supporting structure as a result of wind from the most critical direction for this parameter. The individual maximums specified may not occur simultaneously. All forces are referenced to the mounting pipe.
Boresite Cross Polarization Discrimination (XPD)	The difference between the peak of the co-polarized main beam and the maximum cross-polarized signal over an angle twice the 3 dB beamwidth of the co-polarized main beam.
Front-to-Back Ratio	Denotes highest radiation relative to the main beam, at $180^\circ \pm 40^\circ$, across the band. Production antennas do not exceed rated values by more than 2 dB unless stated otherwise.
Gain, Mid Band	For a given frequency band, gain is primarily a function of antenna size. The gain of Andrew antennas is determined by either gain by comparison or by computer integration of the measured antenna patterns.
Operating Frequency Band	Bands correspond with CCIR recommendations or common allocations used throughout the world. Other ranges can be accommodated on special order.
Packaging Type	Andrew standard packing is suitable for export. Antennas are shipped as standard in totally recyclable cardboard or wire-bound crates (dependent on product). For your convenience, Andrew offers heavy duty export packing options.
Radiation Pattern Envelope Reference (RPE)	Radiation patterns define an antenna's ability to discriminate against unwanted signals. Under still dry conditions, production antennas will not have any peak exceeding the current RPE by more than 3dB, maintaining an angular accuracy of $\pm 1^\circ$ throughout
Return Loss	The figure that indicates the proportion of radio waves incident upon the antenna that are rejected as a ratio of those that are accepted.
Side Force (FS)	Maximum side force exerted on the mounting pipe as a result of wind from the most critical direction for this parameter. The individual maximums specified may not occur simultaneously. All forces are referenced to the mounting pipe.
Twisting Moment (MT)	Maximum forces exerted on a supporting structure as a result of wind from the most critical direction for this parameter. The individual maximums specified may not occur simultaneously. All forces are referenced to the mounting pipe.
VSWR	Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the operating band.
Wind Speed, operational	For VHL(P)(X), SHP(X), HX and USX antennas, the wind speed where the maximum antenna deflection is 0.3 x the 3 dB beam width of the antenna. For other antennas, it is defined as a deflection is equal to or less than 0.1 degrees.
Wind Speed, survival	The maximum wind speed the antenna, including mounts and radomes, where applicable, will withstand without permanent deformation. Realignment may be required. This wind speed is applicable to antenna with the specified amount of radial ice.