

# LX6-7W-6WH



1.8m | 6ft ValuLine® Low Wind Load Antenna, dual-polarized, 7.125 – 8.500 GHz, white, CPR112G flange

## Product Classification

<b>Product Type</b>	Microwave antenna
<b>Product Brand</b>	ValuLine®

## General Specifications

<b>Antenna Type</b>	LX - ValuLine® Low Wind Load Antenna, dual-polarized
<b>Polarization</b>	Dual
<b>Antenna Input</b>	CPR112G
<b>Antenna Color</b>	White
<b>Reflector Construction</b>	One-piece reflector
<b>Radome Color</b>	Gray
<b>Radome Material</b>	Molded
<b>Flash Included</b>	No
<b>Side Struts, Included</b>	1
<b>Side Struts, Optional</b>	1

## Dimensions

<b>Diameter, nominal</b>	1.8 m   6 ft
--------------------------	--------------

## Electrical Specifications

<b>Operating Frequency Band</b>	7.125 – 8.500 GHz
<b>Gain, Low Band</b>	39.2 dBi
<b>Gain, Mid Band</b>	39.7 dBi
<b>Gain, Top Band</b>	40.3 dBi
<b>Front-to-Back Ratio</b>	60 dB
<b>Return Loss</b>	23.9 dB
<b>VSWR</b>	1.14
<b>Radiation Pattern Envelope Reference (RPE)</b>	7439

# LX6-7W-6WH

---

## Electrical Compliance

IC 3059A | IC 3064A | US FCC Part 101A | US FCC Part 74A

## Electrical Specifications, Band 2

### Beamwidth, Horizontal

1.6 °

### Beamwidth, Vertical

1.6 °

### Boresite Cross Polarization Discrimination (XPD)

33 dB

## Mechanical Specifications

### Compatible Mounting Pipe Diameter

115 mm | 4.5 in

### Fine Azimuth Adjustment Range

±15°

### Fine Elevation Adjustment Range

±5°

### Wind Speed, operational

200 km/h | 124.274 mph

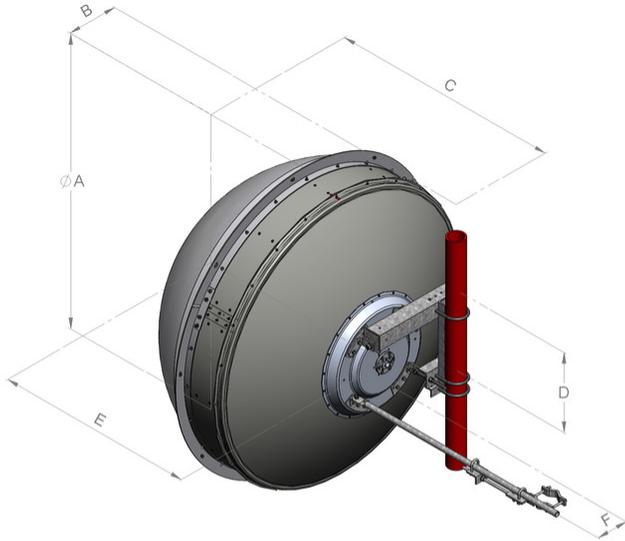
### Wind Speed, survival

200 km/h | 124.274 mph

# LX6-7W-6WH

## Antenna Dimensions and Mounting Information

HX6



Dimensions in inches (mm)						
Antenna size, ft (m)	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)

## Wind Forces at Wind Velocity Survival Rating

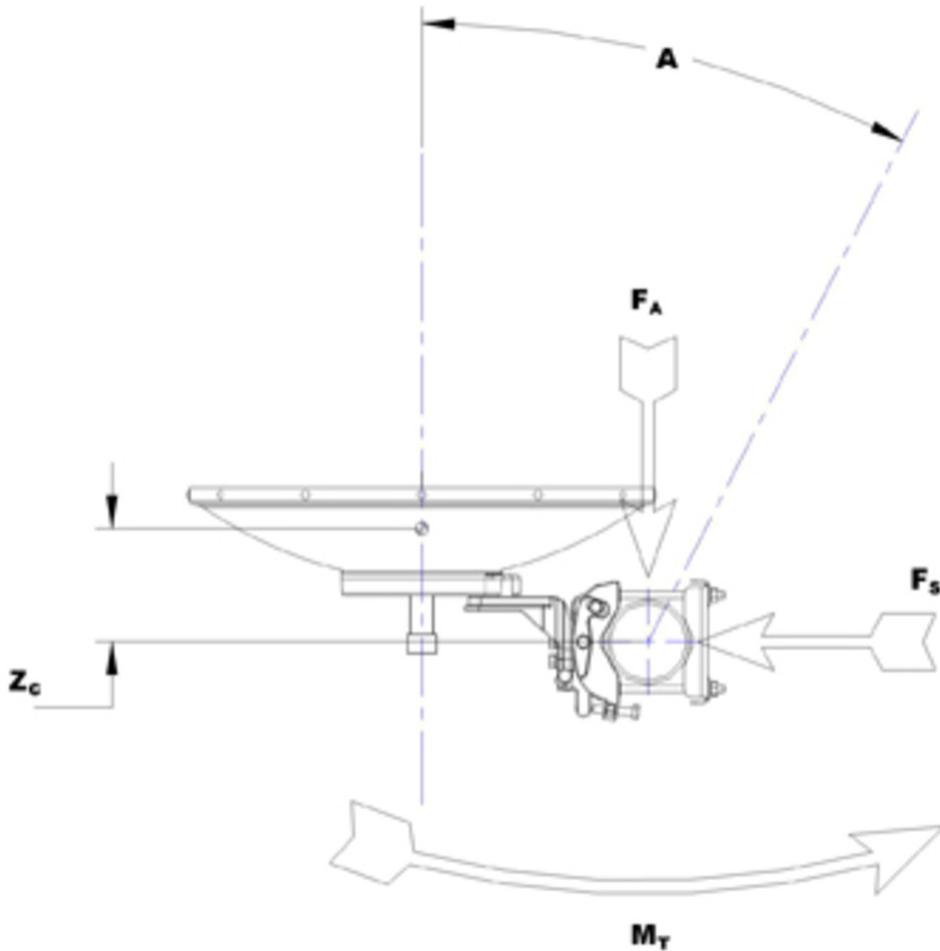
<b>Axial Force (FA)</b>	4670 N   1,049.858 lbf
<b>Angle <math>\alpha</math> for MT Max</b>	-120 °
<b>Side Force (FS)</b>	2050 N   460.858 lbf
<b>Twisting Moment (MT)</b>	2500 N-m   22,126.863 in lb
<b>Force on Inboard Strut Side</b>	2900 N   651.946 lbf
<b>Zcg without Ice</b>	490 mm   19.291 in
<b>Zcg with 1/2 in (12 mm) Radial Ice</b>	540 mm   21.26 in
<b>Weight with 1/2 in (12 mm) Radial Ice</b>	191 kg   421.082 lb

# LX6-7W-6WH

---

# LX6-7W-6WH

## Wind Forces at Wind Velocity Survival Rating Image



## Packaging and Weights

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

## \* Footnotes

# LX6-7W-6WH

---

<b>Operating Frequency Band</b>	Bands correspond with CCIR recommendations or common allocations used throughout the world. Other ranges can be accommodated on special order.
<b>Gain, Mid Band</b>	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.
<b>Front-to-Back Ratio</b>	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.
<b>Return Loss</b>	The figure that indicates the proportion of radio waves incident upon the antenna that are rejected as a ratio of those that are accepted.
<b>VSWR</b>	Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the operating band.
<b>Radiation Pattern Envelope Reference (RPE)</b>	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
<b>Wind Speed, operational</b>	For VHLP(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.
<b>Wind Speed, survival</b>	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.
<b>Axial Force (FA)</b>	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.
<b>Side Force (FS)</b>	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.
<b>Twisting Moment (MT)</b>	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.
<b>Packaging Type</b>	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.