# HX10-11W-2GF

3.0m | 10ft ValuLine® High Performance, High XPD Antenna, dual-polarized, 10.000 – 11.700 GHz, grey, PBR100 flange

## Product Classification

**Product Type**

Microwave antenna

## General Specifications

**Antenna Type**

HX - ValuLine® High Performance, High XPD Antenna, dual-polarized

**Polarization**

Dual

**Antenna Input**

PBR100

**Antenna Color**

Gray

**Reflector Construction**

Two-piece reflector

**Radome Color**

Gray

**Radome Material**

Fabric

**Flash Included**

Yes

**Side Struts, Included**

2

**Side Struts, Optional**

3

## Dimensions

**Diameter, nominal**

3.0 m | 10 ft
Antenna Dimensions and Mounting Information

### Dimensions in inches (mm)

<table>
<thead>
<tr>
<th>Antenna Size, ft (m)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 (3)</td>
<td>8.0 (203)</td>
<td>22.5 (572)</td>
<td>125.0 (3174)</td>
<td>38.6 (980)</td>
<td>71.1 (1807)</td>
<td>10.3 (262)</td>
</tr>
</tbody>
</table>

**Electrical Specifications**

- **Operating Frequency Band**: 10.000 – 11.700 GHz
- **Gain, Low Band**: 47.2 dBi
- **Gain, Mid Band**: 47.9 dBi
- **Gain, Top Band**: 48.5 dBi
- **Boresite Cross Polarization Discrimination (XPD)**: 33 dB
- **Front-to-Back Ratio**: 76 dB
- **Beamwidth, Horizontal**: 0.7 °
- **Beamwidth, Vertical**: 0.7 °
- **Return Loss**: 26 dB
VSWR
Radiation Pattern Envelope Reference (RPE)
Electrical Compliance

Cross Polarization Discrimination (XPD) Electrical Compliance

Mechanical Specifications
Compatible Mounting Pipe Diameter
Fine Azimuth Adjustment Range
Fine Elevation Adjustment Range
Wind Speed, operational
Wind Speed, survival

Wind Forces at Wind Velocity Survival Rating
Axial Force (FA)
Angle a for MT Max
Side Force (FS)
Twisting Moment (MT)
Force on Inboard Strut Side
Force on Outboard Strut Side
Zcg without Ice
Zcg with 1/2 in (12 mm) Radial Ice
Weight with 1/2 in (12 mm) Radial Ice
Packaging and Weights

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height, packed</td>
<td>1170 mm</td>
</tr>
<tr>
<td>Width, packed</td>
<td>1930 mm</td>
</tr>
<tr>
<td>Length, packed</td>
<td>3410 mm</td>
</tr>
<tr>
<td>Packaging Type</td>
<td>Standard pack</td>
</tr>
<tr>
<td>Volume</td>
<td>7.7 m³</td>
</tr>
<tr>
<td>Weight, gross</td>
<td>513 kg</td>
</tr>
<tr>
<td>Weight, net</td>
<td>263 kg</td>
</tr>
</tbody>
</table>

Regulatory Compliance/Certifications
Agency Classification
ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

* Footnotes

Wind Speed, operational
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.

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.

Operating Frequency Band
Bands correspond with CCIR recommendations or common allocations used throughout the world. Other ranges can be accommodated on special order.

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.

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° ±40°, across the band. Production antennas do not exceed rated values by more than 2 dB unless stated otherwise.

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.

VSWR
Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the operating band.

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 +/-1° throughout.

Cross Polarization Discrimination (XPD) Electrical Compliance
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.

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.

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.

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.