# Product Specifications









### P2F-49-NXA

0.6 m | 2 ft Standard Parabolic Unshielded Antenna, single-polarized, unpressurized, 4.940-4.990 GHz, N Female, gray antenna, molded gray radome with flash, standard pack—one-piece reflector

## **General Specifications**

Antenna Type PF - Standard Parabolic Unshielded Antenna, single-polarized, unpressurized

Diameter, nominal 0.6 m | 2 ft
Packing Standard pack
Radome Color Gray
Radome Material Molded
Reflector Construction One-piece reflector

Antenna Input N Female

Antenna Color Gray

Antenna Type PF - Standard Parabolic Unshielded Antenna, single-polarized, unpressurized

Diameter, nominal 0.6 m | 2
Flash Included Yes
Polarization Single

### **Electrical Specifications**

Operating Frequency Band 4.940 – 4.990 GHz

Beamwidth, Horizontal 6.6° Beamwidth, Vertical 6.6° Cross Polarization Discrimination (XPD) 30 dB Front-to-Back Ratio 42 dB Gain, Low Band 27.3 dBi Gain, Mid Band 27.4 dBi 27.6 dBi Gain, Top Band 4.940 - 4.990 GHz Operating Frequency Band

Radiation Pattern Envelope Reference (RPE) 7104
Return Loss 14.0 dB
VSWR 1.50

## **Mechanical Specifications**

Fine Azimuth Adjustment  $\pm 5^{\circ}$ Fine Elevation Adjustment  $\pm 5^{\circ}$ 

Mounting Pipe Diameter 50 mm-115 mm | 2.0 in-4.5 in

Net Weight 7 kg | 15 lb

Side Struts, Included 0
Side Struts, Optional 0

Wind Velocity Operational 110 km/h | 68 mph Wind Velocity Survival Rating 250 km/h | 155 mph

### Wind Forces At Wind Velocity Survival Rating

# Product Specifications

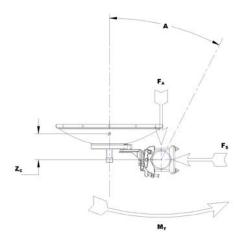


P2F-49-NXA

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## **Wind Forces At Wind Velocity Survival Rating Image**



#### **Packed Dimensions**

Gross Weight, Packed Antenna	20.0 kg	44.1 lb	
Height	630.0 mm		24.8 in
Length	700.0 mm		27.6 in
Volume	$0.3 \; m^3$		

# Product Specifications

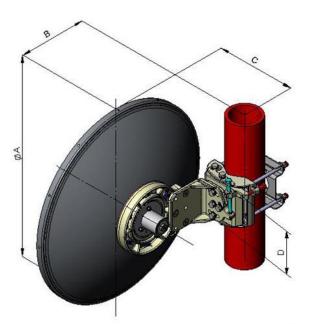


P2F-49-NXA

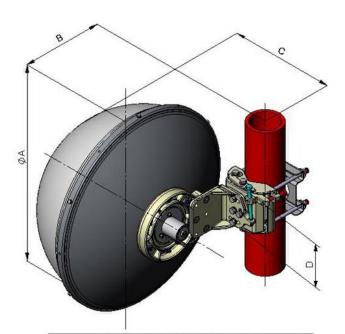
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## **Antenna Dimensions And Mounting Information**



Dimensions Without Radome, inches (mm)					
Antenna Size, ft (m)	A	В	С	D	
2(0.6)	25.1 (637)	12.2 (310)	8.2 (209)	5.9 (150)	



Dimensions, With Radome, inches (mm)						
Antenna Size, ft (m)	A	В	С	D		
2 (0.6)	25.1 (637)	12.2 (310)	19.1 (484)	5.9 (150)		

## **Regulatory Compliance/Certifications**

**Agency** ISO 9001:2008

#### Classification

Designed, manufactured and/or distributed under this quality management system

## \* Footnotes

Axial Force (FA)

Gain, Mid Band

Packing

Return Loss

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.

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.

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.

Bands correspond with CCIR recommendations or common allocations used throughout the world. Other ranges can be

Operating Frequency Band

accommodated on special order.

Andrew standard packing is suitable for export. Antennas are shipped as standard in totally recyclable cardboard or wire-

Radiation Pattern Envelope Reference (RPE)

bound crates (dependent on product). For your convenience, Andrew offers heavy duty export packing options.

Radiation patterns determine an antenna's ability to discriminate against unwanted signals under conditions of radio

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congestion. Radiation patterns are dependent on antenna series, size, and frequency. The figure that indicates the proportion of radio waves incident upon the antenna that are rejected as a ratio of those that

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.

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

Wind Velocity Operational

The wind speed where the antenna deflection is equal to or less than 0.1 degrees. In the case of ValuLine antennas, it is defined as a maximum deflection of  $0.3 \times 10^{-2}$  x the 3 dB beam width of the antenna.

Wind Velocity Survival Rating

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.