### HPX15-77-D1M



4.6 m | 15 ft High Performance Parabolic Shielded Antenna, dual-polarized, 7.725–8.275 GHz, PDR84, gray antenna, standard white radome with flash, standard pack—two-piece reflector

#### **Product Classification**

Product Type Microwave antenna

### General Specifications

Antenna Type HPX - High Performance Parabolic Shielded Antenna, dual-polarized

Diameter, nominal4.6 m | 15 ftPackingStandard pack

**Radome Color** White **Radome Material** Standard

**Reflector Construction** Two-piece reflector

Antenna InputPDR84Antenna ColorGray

Antenna Type HPX - High Performance Parabolic Shielded Antenna, dual-polarized

**Diameter, nominal** 4.6 m | 15 ft

Flash Included Yes
Polarization Dual

## **Electrical Specifications**

Operating Frequency Band7.725 – 8.275 GHzElectrical ComplianceUS FCC Part 78BOperating Frequency Band7.725 – 8.275 GHz

### Mechanical Specifications

Fine Azimuth Adjustment ±5°
Fine Elevation Adjustment ±3.6°

Mounting Pipe Diameter 115 mm | 4.5 in

Net Weight 499 kg | 1100 lb

Side Struts, Included1 inboardSide Struts, Optional2 outboard

page 1 of 5 May 3, 2019



# HPX15-77-D1M

Wind Velocity Operational 110 km/h | 68 mph Wind Velocity Survival Rating 200 km/h | 125 mph

### Wind Forces At Wind Velocity Survival Rating

Angle  $\alpha$  for MT Max 110  $^{\circ}$ 

 Axial Force (FA)
 39672 N | 8919 lbf

 Force on Inboard Strut Side
 35233 N | 7921 lbf

 Side Force (FS)
 19652 N | 4418 lbf

 Twisting Moment (MT)
 29828 N-m | 22000 ft lb

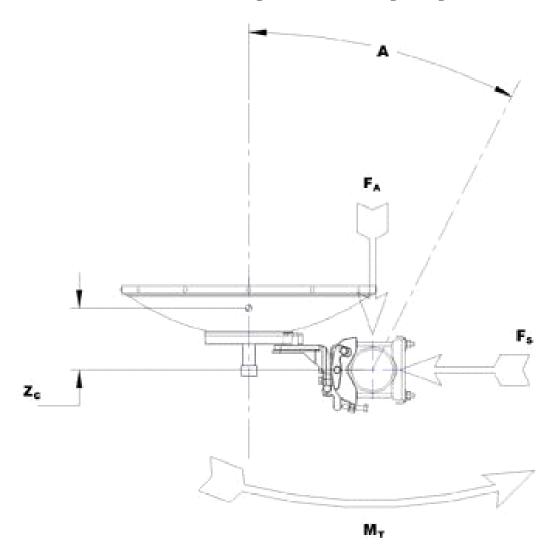
 Weight with 1/2 in (12 mm) Radial Ice
 952 kg | 2099 lb

 Zcg with 1/2 in (12 mm) Radial Ice
 1372 mm | 54 in

 Zcg without Ice
 1306 mm | 51 in



# Wind Forces At Wind Velocity Survival Rating Image



#### Packed Dimensions

 Gross Weight, Packed Antenna
 1136.0 kg | 2504.5 lb

 Height
 2570.0 mm | 101.2 in

 Length
 4930.0 mm | 194.1 in

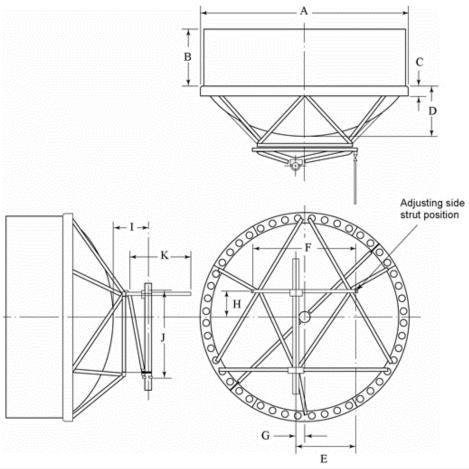
Volume 19.4 m<sup>3</sup>

**Width** 1530.0 mm | 60.2 in

page 3 of 5 May 3, 2019



## Antenna Dimensions And Mounting Information



ANTENNA DIMENSIONS All dimensions in mm (inches)			
Α.	4685 (184.5)	G	200 (8)
В	1245 (49.0)	, H	595 (23.5)
С	135 (5.3)	1	595 (23.5)
D	865 (34.0)	J	1930 (76.0)
E	1310 (51.5)	К	1240 (108)
F	2210 (87)		

## Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

**COMMSCOPE®** 

### HPX15-77-D1M



#### \* Footnotes

**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.

**Operating Frequency Band**Bands correspond with CCIR recommendations or common allocations used throughout the world.

Other ranges can be accommodated on special order.

**Packing** 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.

**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.

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 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.