

**Andrew Solutions****UBP300-2-B**

**0.3 m | 1.0 ft Flat Panel Directional Antenna for Unlicensed Band, single-polarized, 2.300–2.700 GHz, Type N Female, gray antenna, plastic gray radome without flash, standard pack—one-piece reflector (bulk pack)**

## General Specifications

Packing	Standard pack
Radome Color	Gray
Radome Material	UV Protected Plastic
Reflector Construction	One-piece reflector
Antenna Input	N Female
Antenna Color	Gray
Antenna Type	UB - Directional Antenna for Unlicensed Band, single-polarized
Diameter, nominal	0.3 m   1 ft
Flash Included	No
Includes	Mounting kit
Polarization	Single

## Electrical Specifications

Beamwidth, Horizontal	20.0 °
Beamwidth, Vertical	20.0 °
Cross Polarization Discrimination (XPD)	20 dB
Electrical Compliance	ETSI 301 525 V1.1.1 (2000-06) Class TS 1
Front-to-Back Ratio	28 dB
Gain, Low Band	15.5 dBi
Gain, Mid Band	17.5 dBi
Gain, Top Band	18.0 dBi
Operating Frequency Band	2.300 – 2.700 GHz
Return Loss	14.0 dB
VSWR	1.50

## Mechanical Specifications

Fine Elevation Adjustment	+40° to -23°
Mounting Pipe Diameter	25 mm–76 mm   1 in–3 in
Net Weight, per unit with mounting kit	2 kg   5 lb
Side Struts, Included	0
Side Struts, Optional	0
Wind Velocity Operational	160 km/h   99 mph
Wind Velocity Survival Rating	220 km/h   137 mph

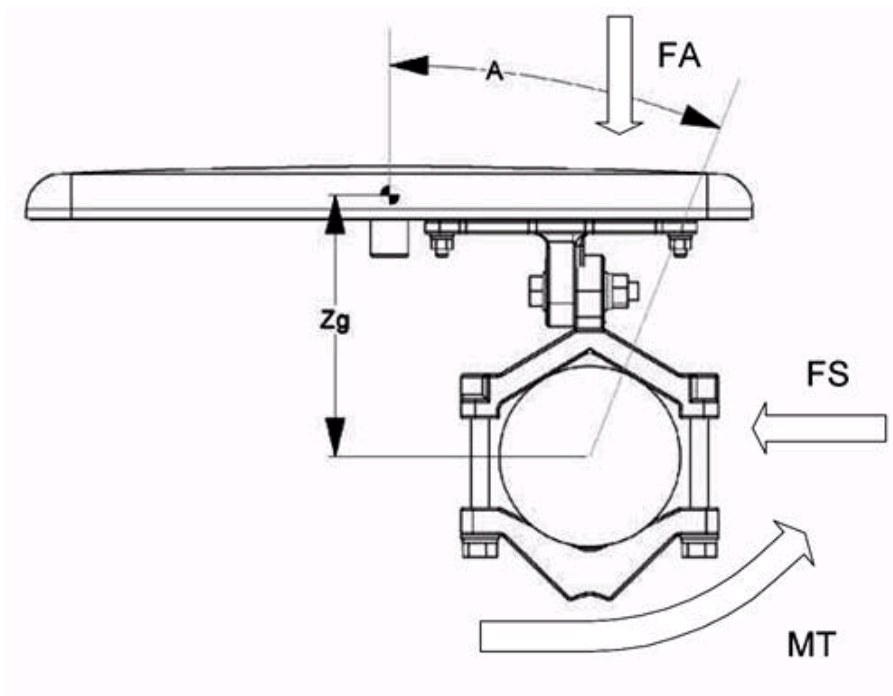
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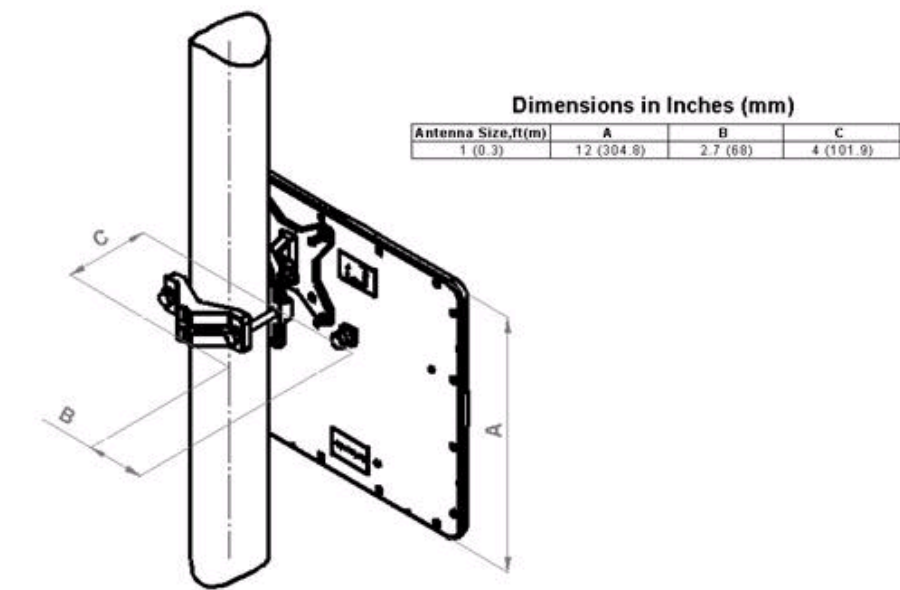
## Wind Forces At Wind Velocity Survival Rating

Angle $\alpha$ for MT Max	5 °
Axial Force (FA)	263 N   59 lbf
Side Force (FS)	22 N   5 lbf
Twisting Moment (MT)	27 N•m
Weight with 1/2 in (12 mm) Radial Ice	4 kg   10 lb
Zcg with 1/2 in (12 mm) Radial Ice	170 mm   7 in
Zcg without Ice	163 mm   6 in

## Wind Forces At Wind Velocity Survival Rating Image



Antenna Dimensions And Mounting Information



Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



\* 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.
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.
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.
Packing	Andrew standard packing is suitable for export. Antennas are shipped as standard in totally recyclable cardboard or wire-bound crates (dependent on

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	product). For your convenience, Andrew offers heavy duty export packing options.
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 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.