

# 1.2m (4ft) High XPD Antenna

## General Specifications



Diameter, nominal, m (ft)	1.2 (4)
Polarization	Dual, V and H
Antenna Interface	Standard Flange
Antenna Color	Light Gray
Radome Color	White
Radome Material Description	High-strength Compound Fabric
Packing	Fumigating-free plywood Crate
RoHS 2002/95/EC	Compliant

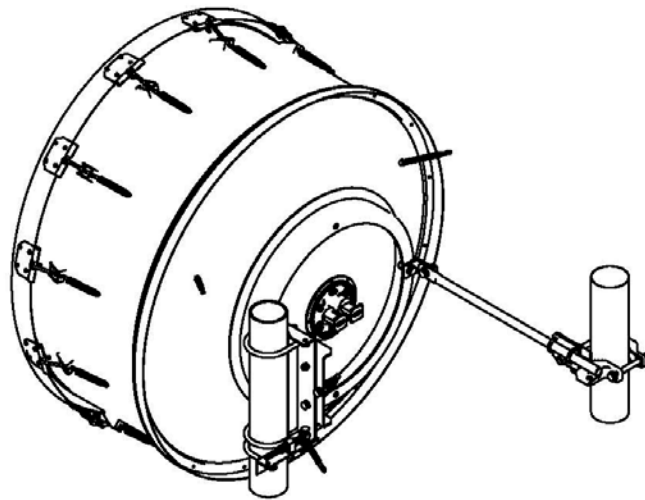
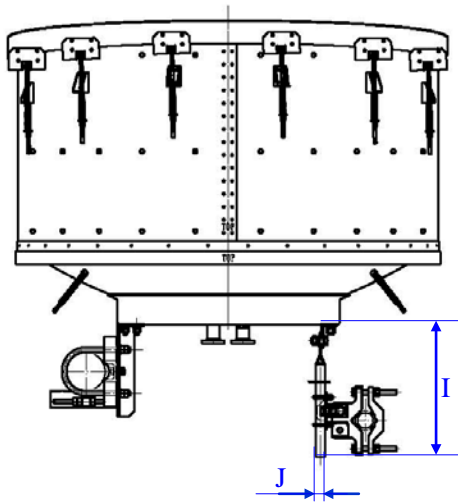
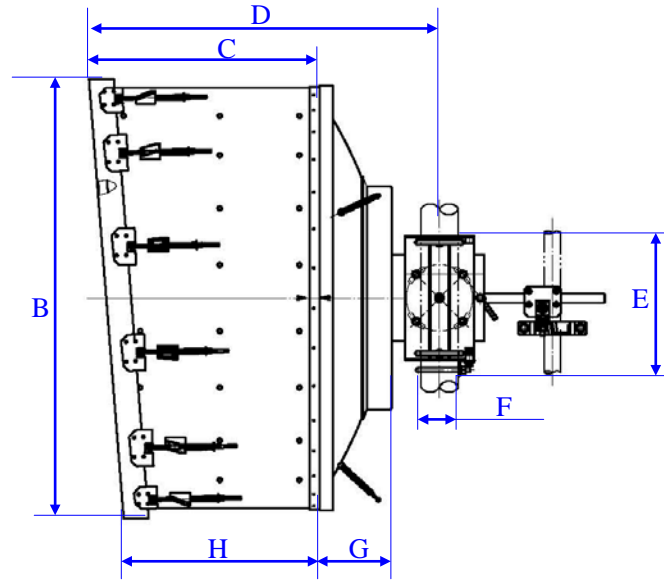
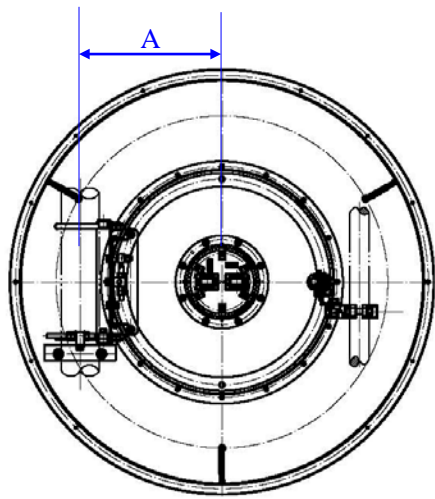
## Electrical Specifications

Antenna Type	WTJ12-W77-FD
Frequency Band (GHz)	7.725-8.500
Standard Flange	PDR84
Gain (dBi), Low	36.7
Gain (dBi), Mid	37.0
Gain (dBi), High	37.5
3 dB BW (°)	2.3
VSWR	1.12
F/B Ratio (dB)	63
XPD (dB)	38
Isolation(dB)	48
ETSI Standard	R1, C3

## Mechanical Specifications

Wind Velocity Operational, km/h	200
Wind Velocity Survival Rating, km/h	250
Coarse Azimuth, Degree	360
Fine Azimuth Adjustment, Degree	±10
Fine Elevation Adjustment, Degree	±10
Mounting Pipe Diameter, mm	Ø114
Feeder Watertightness	Watertight
Operation Pressurization, KPa	50
Operation Temperature, °C	-45 ~ +60
Storage Temperature, °C	-55 ~ +70
Ice Load, mm	25
Strengthening Rod	1
Adjustable Rod	NA
Net Weight, kg	65±2
Gross Weight, Packed Antenna, kg	110±4
Packing Length, mm	1500
Packing Width, mm	810
Packing Height, mm	1650
Packing Volume, m <sup>3</sup>	2.0

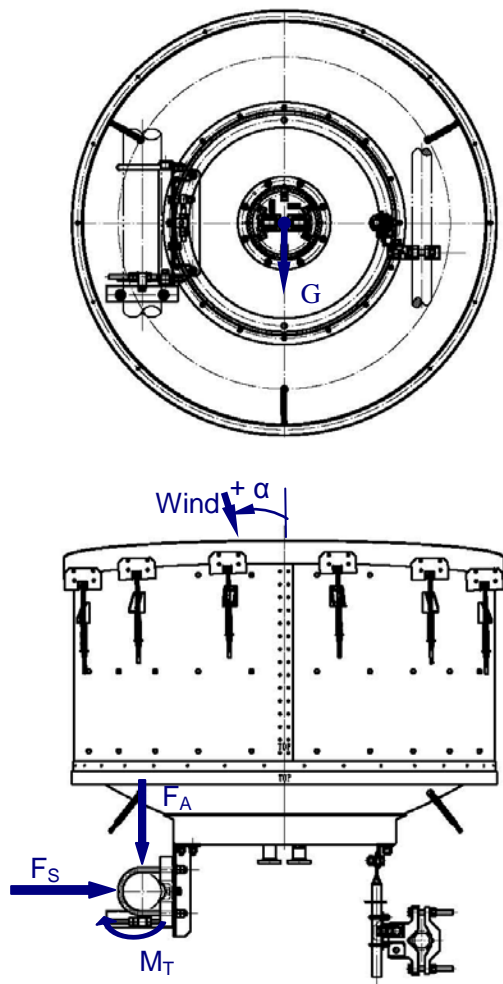
# Outline Dimensions



A	B	C	D	E	F	G	H	I	J
428	Ø1322	695	1057	424	Ø114	219	595	1500	Ø26.8

# Wind Forces

The axial, side and twisting moment forces stated are maximum loads applied to the tower by the antenna at a survival wind speed of 200 km/h. They are, in every case, the result of wind from the most critical direction for each parameter. The individual maximums may not occur simultaneously. All forces are referenced to the antenna mounting pipe.



Axial Force ( $F_A$ ), N	5230
Side Force ( $F_S$ ), N	2570
Twisting Moment ( $M_T$ ), N•m	2260
Angle $\alpha$ for MT Max, Degree	-10

# Radiation Pattern Envelope

Co-polar and X-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

HV – Response of horizontally polarized port to a vertically polarized signal.

VV – Response of vertically polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

