

2.4m (8ft) High XPD Antenna

General Specifications



Diameter, nominal, m (ft)	2.4 (8)
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

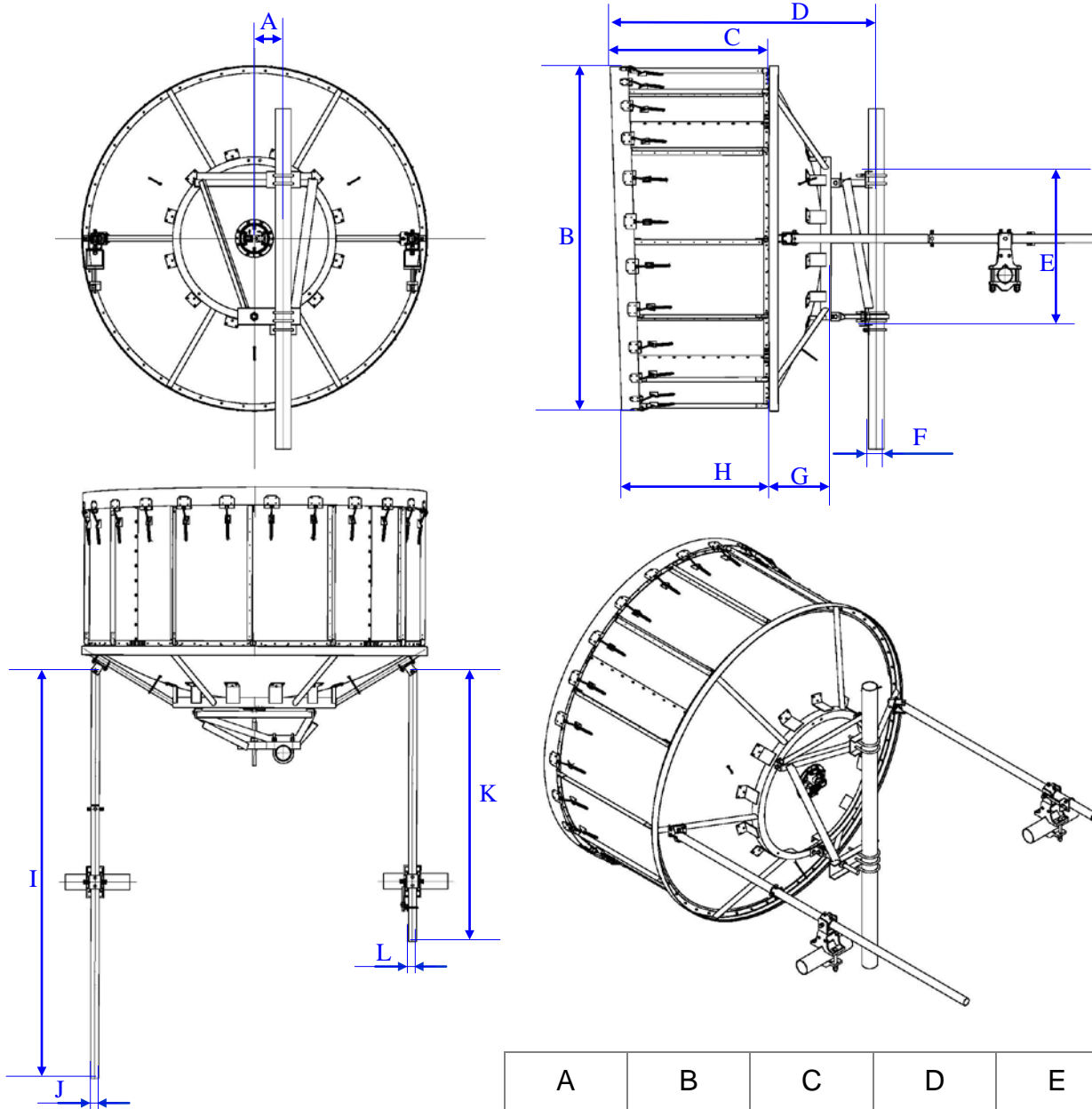
Electrical Specifications

Antenna Type	WTJ24-W77-FD
Frequency Band (GHz)	7.725-8.500
Standard Flange	PDR84
Gain (dBi), Low	43.0
Gain (dBi), Mid	43.3
Gain (dBi), High	43.6
3 dB BW (°)	1.1
VSWR	1.12
F/B Ratio (dB)	69
Isolation(dB)	48
XPD (dB)	38
ETSI Standard	R1, C3

Mechanical Specifications

Wind Velocity Operational, km/h	110
Wind Velocity Survival Rating, km/h	200
Coarse Azimuth, Degree	360
Fine Azimuth Adjustment, Degree	±5
Coarse Elevation, Degree	NA
Fine Elevation Adjustment, Degree	±5
Mounting Pipe Diameter, mm	φ114
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	234±2
Gross Weight, Packed Antenna, kg	353±4
Length, mm	2680
Width, mm	1100
Height, mm	2560
Volume, m ³	7.55

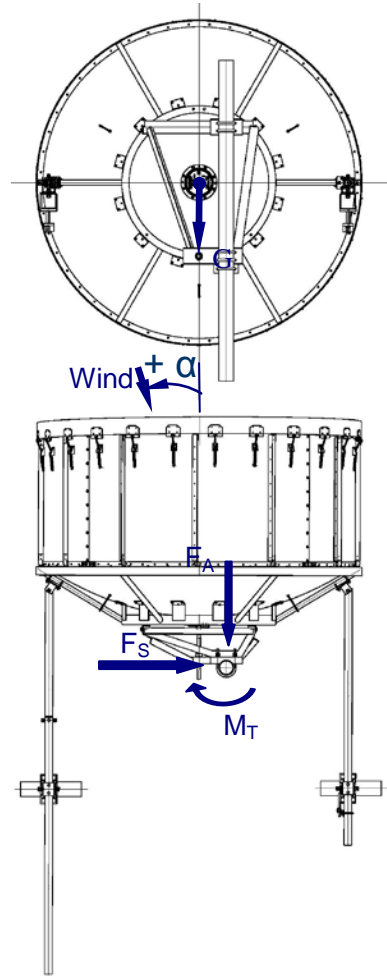
Outline Dimensions



A	B	C	D	E	F	G	H	I	J	K	L
235	Φ2538	1105	1896	1133	Ø114	450.5	1005	3000	Ø60	2000	Ø60

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 200km/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	12340
Side Force (F_S), N	6060
Twisting Moment (M_T), N•m	8170
Angle α for MT Max, Degree	-100

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.

