

2.4m (8ft) high performance dual-polarized antenna



General Specifications

Diameter, nominal, m (ft)	2.4 (8)
Polarization	Dual ,V and H
Antenna Interface	Standard Flange
Antenna Color	Gray
Radome Color	White
Radome Material Description	High-strength Compound Fabric
Packing	Fumigating-free plywood case
RoHS	Compliant

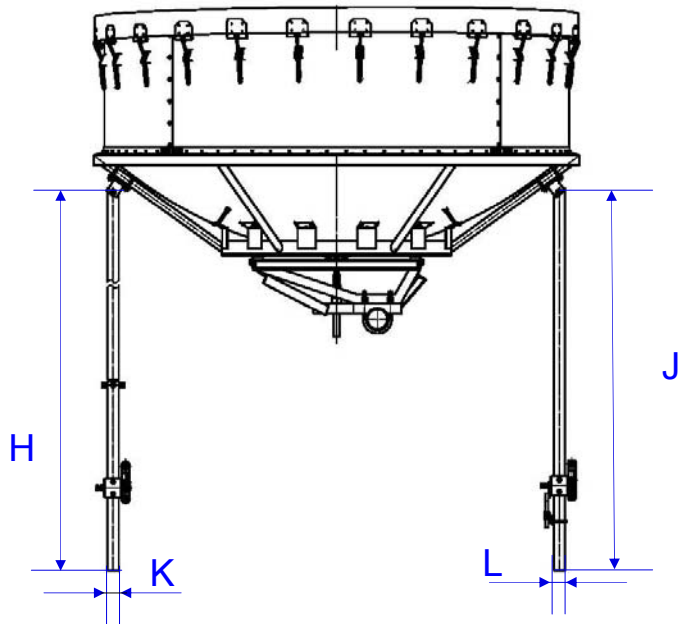
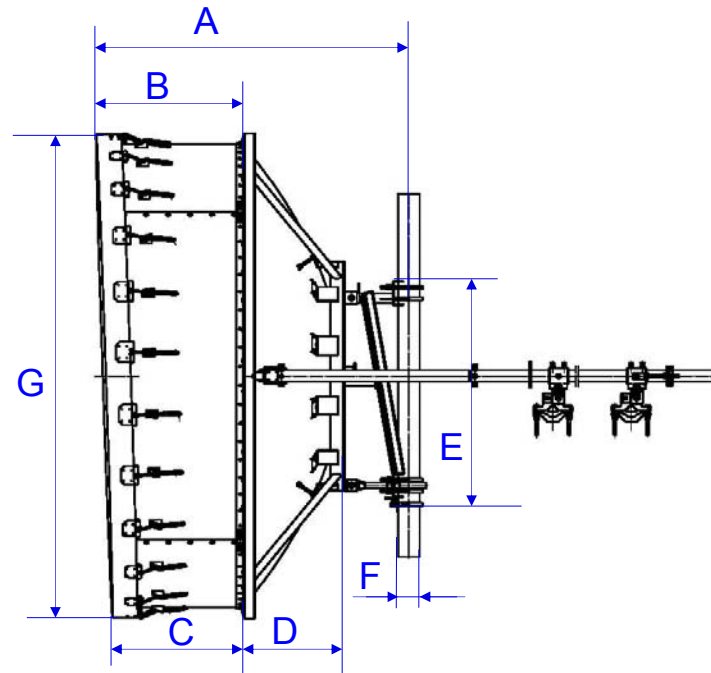
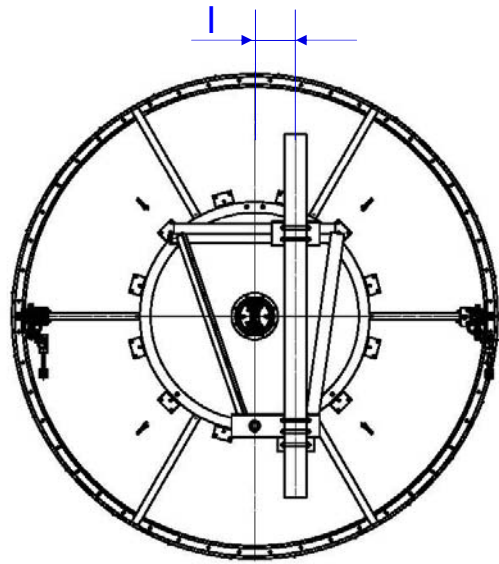
Electrical Specifications

Antenna Type	WTG24-107SAR-FD
Frequency Band (GHz)	10.70~11.70
Standard Flange	PDR100
Gain (dBi), Low	45.8
Gain (dBi), Mid	46.2
Gain (dBi), High	46.6
3 dB BW (°)	0.8
VSWR	1.30
F/B Ratio (dB)	68
Isolation (dB)	35
XPD (dB)	30
ETSI Standard	R1, C2

Mechanical Specifications

Wind Velocity Operational, km/h	126
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	114
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	1
Net Weight, kg	190±10
Gross Weight, Packed Antenna, kg	326±17
Length, mm	2680
Width, mm	1100
Height, mm	2560
Volume, m ³	7.55

Outline Dimensions

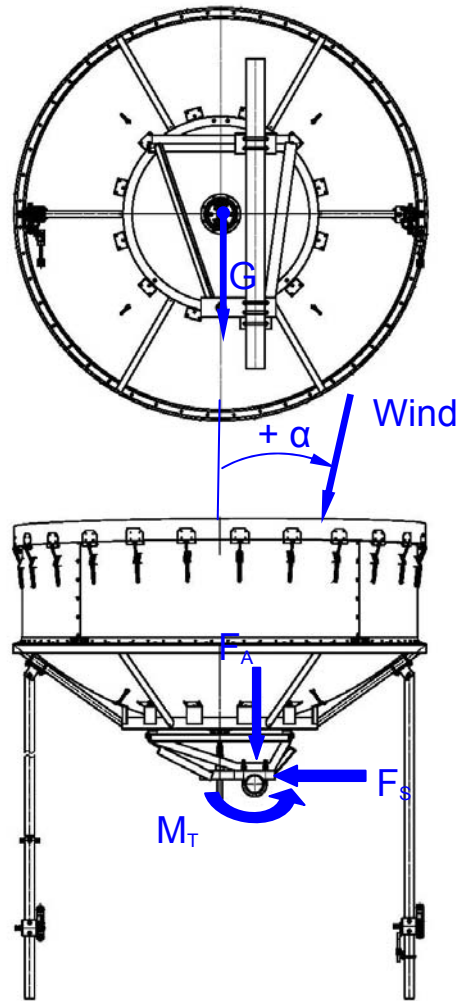


Antenna Dimensions, mm	
A	(1547)
B	(690)
C	(604)
D	(528)
E	(1133)
F	φ114
G	(φ2511)
H	(3010)
I	(235)
J	(2000)
K	(φ60)
L	(φ60)

NOTE: The dimension with“()” is referenced dimension.

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	12080
Side Force (F_S), N	5930
Twisting Moment (M_T), N•m	5550
Angle α for MT Max, Degree	-110

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.

