

# 1.8m (6ft) ultra high performance low profile single-polarized antenna



## General Specifications

Diameter, nominal, m (ft)	1.8 (6)
Polarization	Single, V or 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

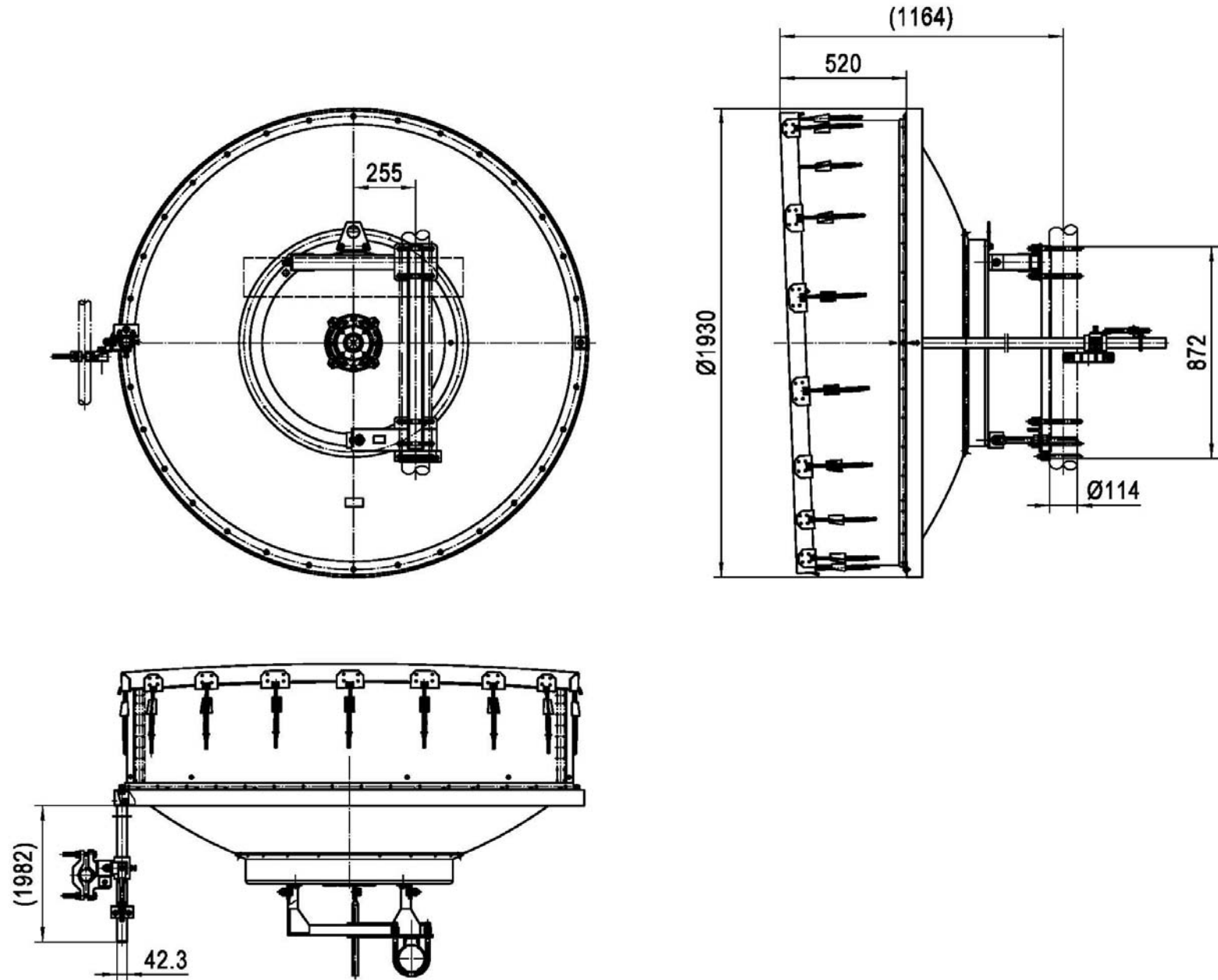
## Electrical Specifications

Antenna Type	WTC18-212DAR-CFB
Frequency Band (GHz)	21.20~23.60
Standard Flange	PBR220
Gain (dBi), Low	48.9
Gain (dBi), Mid	49.4
Gain (dBi), High	49.9
3 dB BW (°)	0.5
VSWR	1.30
F/B Ratio (dB)	74
XPD (dB)	30
ETSI Standard	R3, C3

## Mechanical Specifications

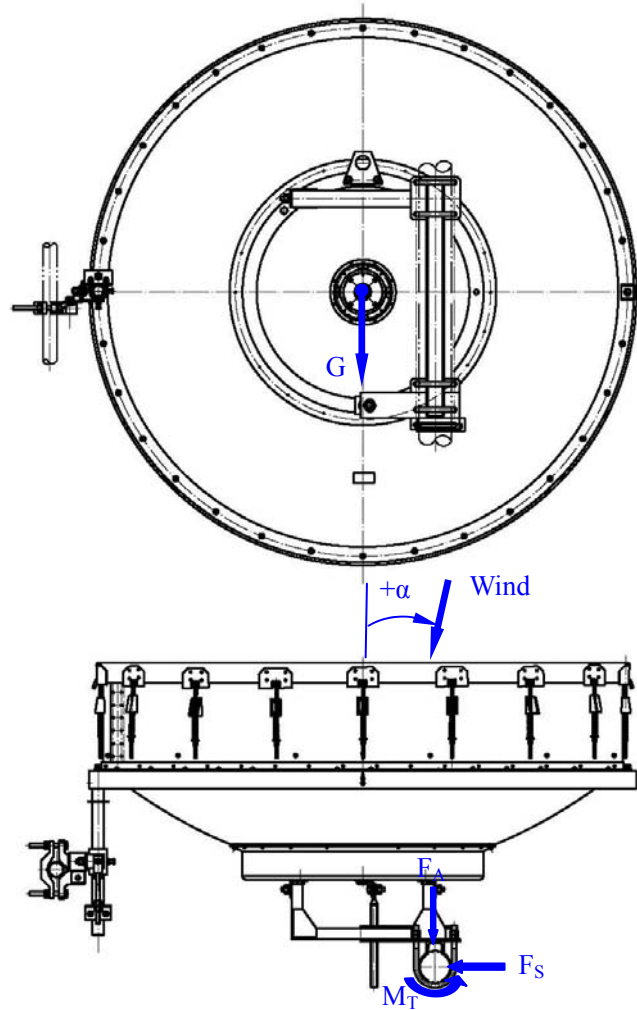
Wind Velocity Operational, km/h	200
Wind Velocity Survival Rating, km/h	250
Coarse Azimuth, Degree	360
Fine Azimuth Adjustment, Degree	±5
Fine Elevation Adjustment, Degree	±5
Mounting Pipe Diameter, mm	φ114
Feeder Watertightness	Watertight
Operation Pressurization, KPa	50
Operation Temperature, °C	-45 ~ +60
Storage Temperature, °C	-55 ~ +70
Ice Load, mm	25
Strengthening Rod	1
Adjustable Rod	NA
Net Weight, kg	102±5
Gross Weight, Packed Antenna, kg	173±8
Packing Length, mm	2100
Packing Width, mm	630
Packing Height, mm	2205
Packing Volume, m <sup>3</sup>	2.92

# Outline Dimensions



# 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 250 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	11150
Side Force ( $F_S$ ), N	5470
Twisting Moment ( $M_T$ ), N•m	4390
Angle $\alpha$ 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.

**1.8m 21.20-23.60GHz RADIATION PATTERN ENVELOPE**

