

12M LEAX-RAY Antennas

SINGLE POLARIZED – High Performance

General data

Antenna size	1.2 m/4 ft
Antenna type	Single polarized, Integrated
Polarization	Vertical/Horizontal
Antenna colour	NCS S 2502 R Grey
Radome type	UV Stabilized PC (6 – 23 GHz) UV Stabilized ABS/PMMA (26 GHz)
Radome colour	NCS S 2502 R Grey
Packing type	Standard Cardboard box
Quantity on one pallet	1 antenna/pallet

Shipping size 1340 mm x 500 mm x 1350 mm



Mechanical data

Temperature, operational	-45 to +55 °C
Relative humidity	15 to 100 %
Wind load, operational	55 m/s (200 km/h)
Wind load, survival	70 m/s (250 km/h)
Mounting kit, tube diameter	90 – 120 mm
Strut kit mounting, tube diameter	50 – 115 mm
Strut kit mounting, L-profile	40 x 40-110 x 110 mm
Panning Performance, in azimuth	±15°
Panning performance, in elevation	±15°
Ice load (713 kg/m³)	25 mm
Side strut, Included	1
Side strut, Optional	1 extra

Electrical data			
Article number	HAE111261	HAE181261	HAE261261
Frequency range (GHz)	10.0 – 11.7	17.1 – 19.7	24.00 – 26.50
Gain (Low-band) (dBi)	40.3	44.7	47.9
Gain (Mid-band) (dBi)	41.0	45.2	48.4
Gain (High-band) (dBi)	41.7	45.7	47.8
Half power bw (deg)	1.5	0.9	0.7
XPD (dB)	30	30	30
F/B Ratio (dB)	67	73	75
VSWR/Return Loss (dB)	1.33:1/17.0	1.30:1/17.7***	1.30:1/17.7
ETSI Compliance	Class 3	Class 3**	Class 3
FCC Compliance	Cat A	Cat A	Cat A
NSMA file	906-HAE1112-F	906-HAE1812-G	906-HAE2612-E
RPE file	226-HAE1112-A	226-HAE1812-A	226-HAE2612-A
Output flange	Racom Specific *	Racom Specific *	Racom Specific *
Radome type	Flat	Flat	Flat
Weight			
Net weight (kg)	24.8	24.7	27.9
Shipping weight (kg)	43.5	43.4	47.6

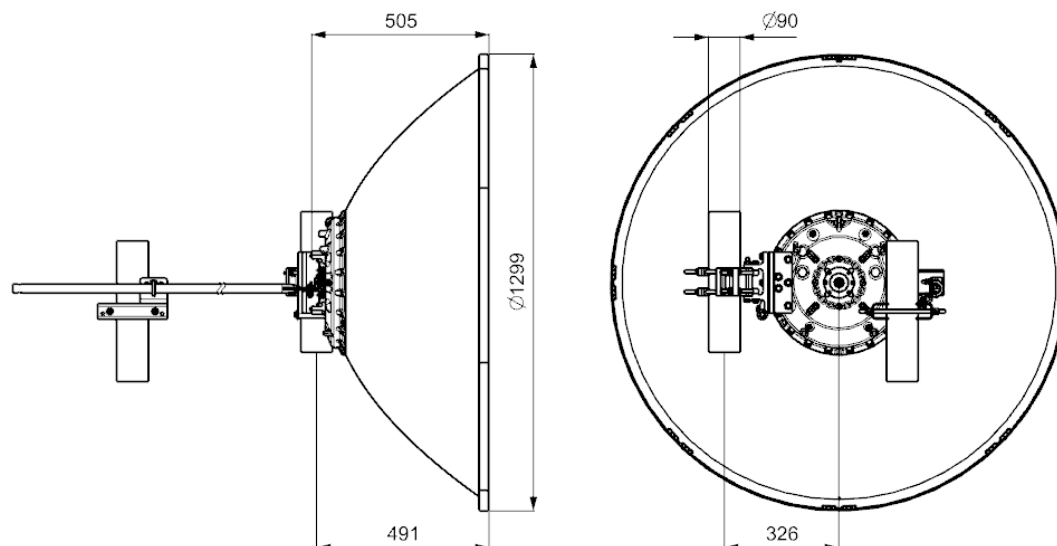
* Each antenna unit is fully equipped to be mounted directly to RACOM RAY unit by Single Polarization mounting kit.

** Per ETSI EN 302 217 - 2

*** Below 17.7 GHz return loss performance is reduced

Drawings

10 - 26 GHz Single Polarized Antenna 12M:



Wind forces

6 - 26 GHz Single Polarized Antenna 12M

Loading to mounting pole @Survival Wind Speed:

Fa: Max Axial Force	4397 N
Fs: Max Side Force (without radio equipment)	542 N
M: Max Torque (at pole Ø90 mm)	1433 Nm

