

# 12M LEAX-RAY Antennas

## SINGLE POLARIZED – High Performance

### General data

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

**Shipping size** 1340 mm x 500 mm x 1350 mm



### Mechanical data

<b>Temperature, operational</b>	-45 to +55 °C
<b>Relative humidity</b>	15 to 100 %
<b>Wind load, operational</b>	55 m/s (200 km/h)
<b>Wind load, survival</b>	70 m/s (250 km/h)
<b>Mounting kit, tube diameter</b>	90 - 120 mm
<b>Strut kit mounting, tube diameter</b>	50 - 115 mm
<b>Strut kit mounting, L-profile</b>	40 x 40-110 x 110 mm
<b>Panning Performance, in azimuth</b>	±15°
<b>Panning performance, in elevation</b>	±15°
<b>Ice load (713 kg/m<sup>3</sup>)</b>	25 mm
<b>Side strut, Included</b>	1
<b>Side strut, Optional</b>	1 extra

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

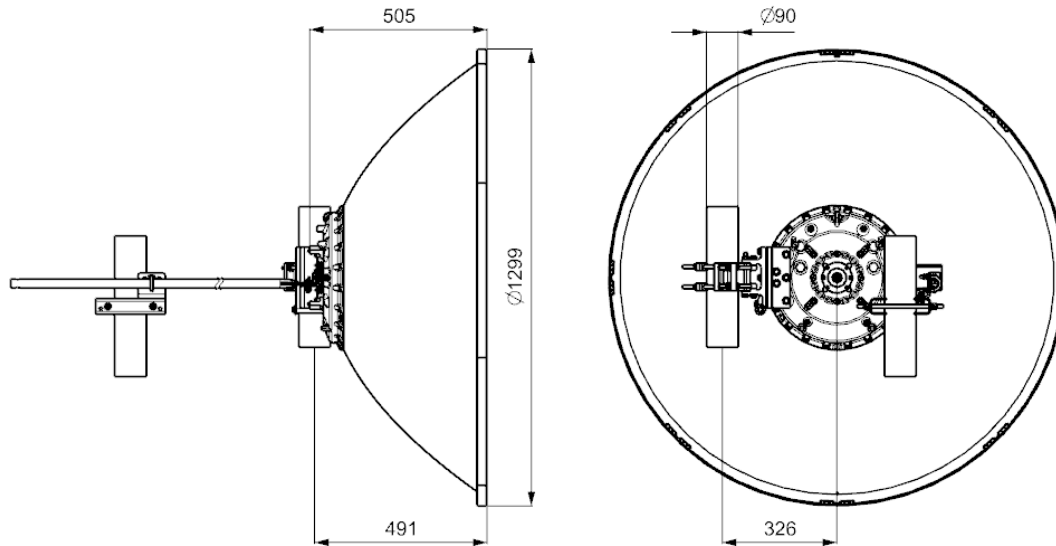
\* Each antenna unit is fully equipped to be mounted directly to RACOM RAY unit by Single Polarization mounting kit.

\*\* 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 $\varnothing 90$ mm)	1433 Nm

