

# 06M LEAX-RAy Antennas

## SINGLE POLARIZED – High Performance

### General data

<b>Antenna size</b>	0.6 m/2 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 (7 – 23 GHz) UV Stabilized ABS/PMMA (24 – 42 GHz)
<b>Radome colour</b>	NCS S 2502 R Grey
<b>Packing type</b>	Standard Cardboard box
<b>Quantity on one pallet</b>	12 antennas/EUR pallet
<b>Shipping size</b>	765 mm x 780 mm x 345 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>	50 – 120 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>	0
<b>Side strut, Optional</b>	0

<b>Electrical data</b>			
<b>Article number</b>	<b>HAE110661</b>	<b>HAE180661</b>	<b>HAE260661</b>
<b>Frequency range (GHz)</b>	10.0 - 11.7	17.1 - 19.7***	24.00 – 26.50
<b>Gain (Low-band) (dBi)</b>	34.1	39.4	42.0
<b>Gain (Mid-band) (dBi)</b>	35.2	39.7	42.4
<b>Gain (High-band) (dBi)</b>	35.2	40.5	42.3
<b>Half power bw (deg)</b>	3.1	2.0	1.4
<b>XPD (dB)</b>	30	30	30
<b>F/B Ratio (dB)</b>	61	69	68
<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>	A/B	Cat A	Cat A
<b>NSMA file</b>	906-HAE1106-G	906-HAE1806-D	906-HAE2606-D
<b>RPE file</b>	226-HAE1106-A	226-HAE1806-A	226-HAE2606-A
<b>Output flange</b>	Racom Specific *	Racom Specific *	Racom Specific *
<b>Radome type</b>	Flat	Flat	Spherical
<b>Weight</b>			
<b>Net weight (kg)</b>	6.6	6.1	7.3
<b>Shipping weight (kg)</b>	10.1	9.6	11.1

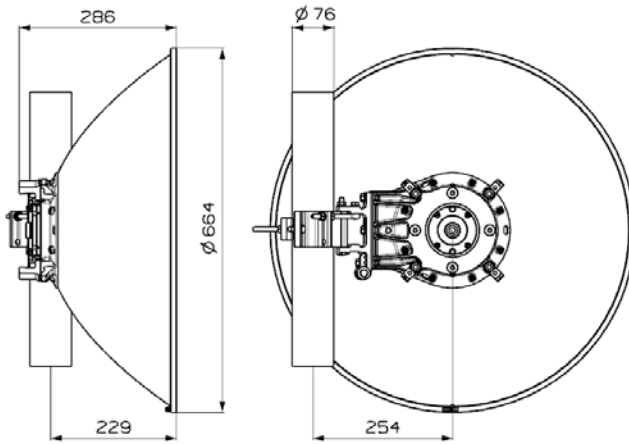
\* Each antenna unit is fully equipped to be mounted directly to RACOM RAY unit by Single Polarization mounting kit.

\*\* Per ETSI EN 302 217 - 2

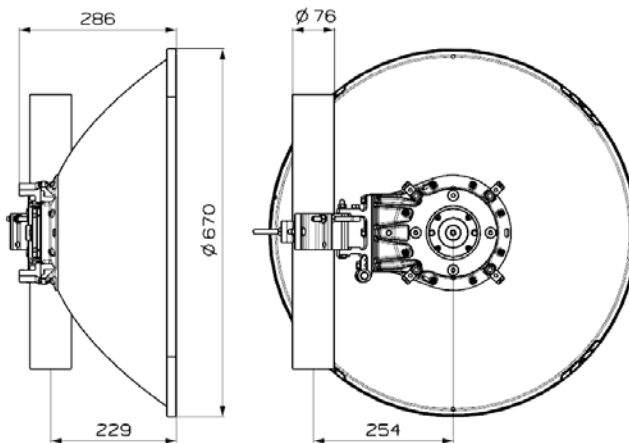
\*\*\* Below 17.7 GHz return loss performance is reduced

**Drawings**

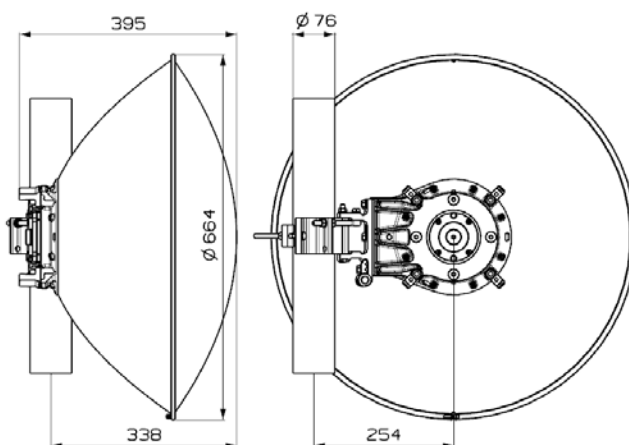
10/11 GHz Single Polarized Antenna 06M:



17/18 GHz Single Polarized Antenna 06M:



24/26 GHz Single Polarized Antenna 06M:



**Wind forces**

**7 - 11 GHz Single Polarized Antenna 06M**

Loading to mounting pole @Survival Wind Speed:

Fa: Max Axial Force	1149 N
Fs: Max Side Force (without radio equipment)	159 N
M: Max Torque (at pole $\varnothing 76$ mm)	292 Nm

**13-23 GHz Single Polarized Antenna 06M**

Loading to mounting pole @Survival Wind Speed:

Fa: Max Axial Force	1170 N
Fs: Max Side Force (without radio equipment)	159 N
M: Max Torque (at pole $\varnothing 76$ mm)	297 Nm

**24-80 GHz Single Polarized Antenna 06M**

Loading to mounting pole @Survival Wind Speed:

Fa: Max Axial Force	934 N
Fs: Max Side Force (without radio equipment)	164 N
M: Max Torque (at pole $\varnothing 76$ mm)	237 Nm

