06M LEAX-RAy Antennas

SINGLE POLARIZED – High Performance

General data	
Antenna size	0.6 m/2 ft
Antenna type	Single polarized, Integrated
Polarization	Vertical/Horizontal
Antenna colour	NCS S 2502 R Grey
Radome type	UV Stabilized PC (7 – 23 GHz) UV Stabilized ABS/PMMA (24 – 42 GHz)
Radome colour	NCS S 2502 R Grey
Packing type	Standard Cardboard box
Quantity on one pallet	12 antennas/EUR pallet
Shipping size	765 mm x 780 mm x 345 mm

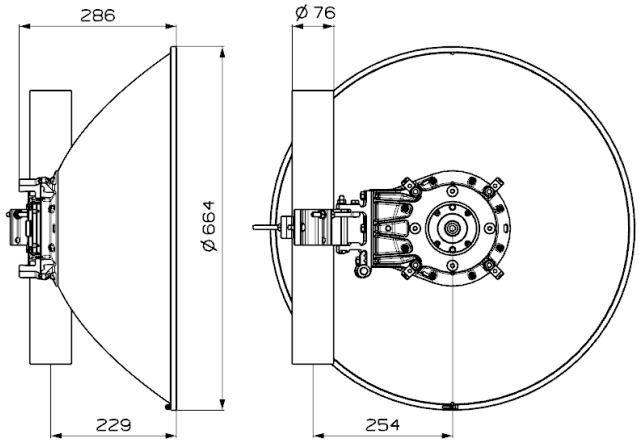
Mechanical data	
Temperature, operational	-45 to +55 °C
Relative humidity	15 to 100 %
Wind load, operational	55 m/s (200 km/h)
Wind load, survival	70 m/s (250 km/h)
Mounting kit, tube diameter	50 – 120 mm
Panning Performance, in azimuth	±15°
Panning performance, in elevation	±15°
Ice load (713 kg/m³)	25 mm
Side strut, Included	0
Side strut, Optional	0

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

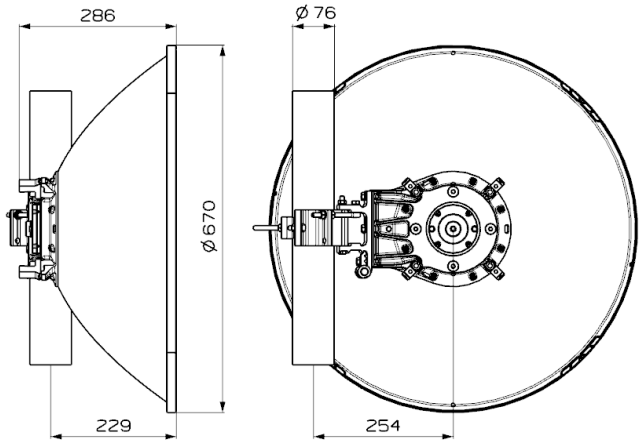
***** Each antenna unit is fully equipped to be mounted directly to RACOM RAy unit by Single Polarization mounting kit.
****** Per ETSI EN 302 217 - 2
******* Below 17.7 GHz return loss performance is reduced

Drawings

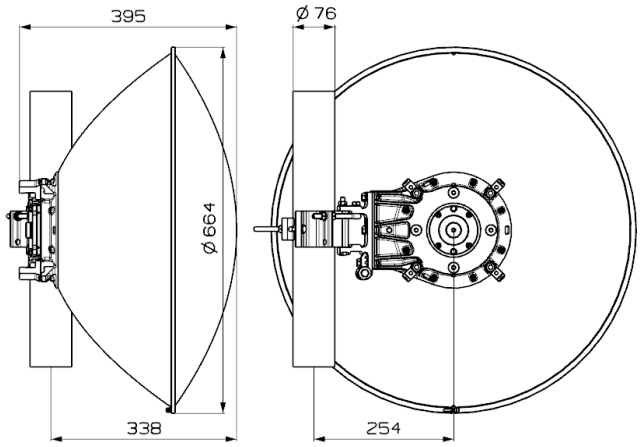
10/11 GHz Single Polarized Antenna 06M:



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 ø76 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 ø76 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 ø76 mm)	237 Nm