03M LEAX-RAy Antennas

SINGLE POLARIZED – High Performance

General data	
Antenna size	0.3 m/1 ft
Antenna type	Single polarized, Integrated
Polarization	Vertical/Horizontal
Antenna colour	NCS S 2502 R Grey
Radome type	UV Stabilized PC
Radome colour	NCS S 2502 R Grey
Packing type	Standard Cardboard box
Quantity on one pallet	24 antennas/EUR pallet
Shipping size	390 mm x 390 mm x 270 mm (10 – 38 GHz)

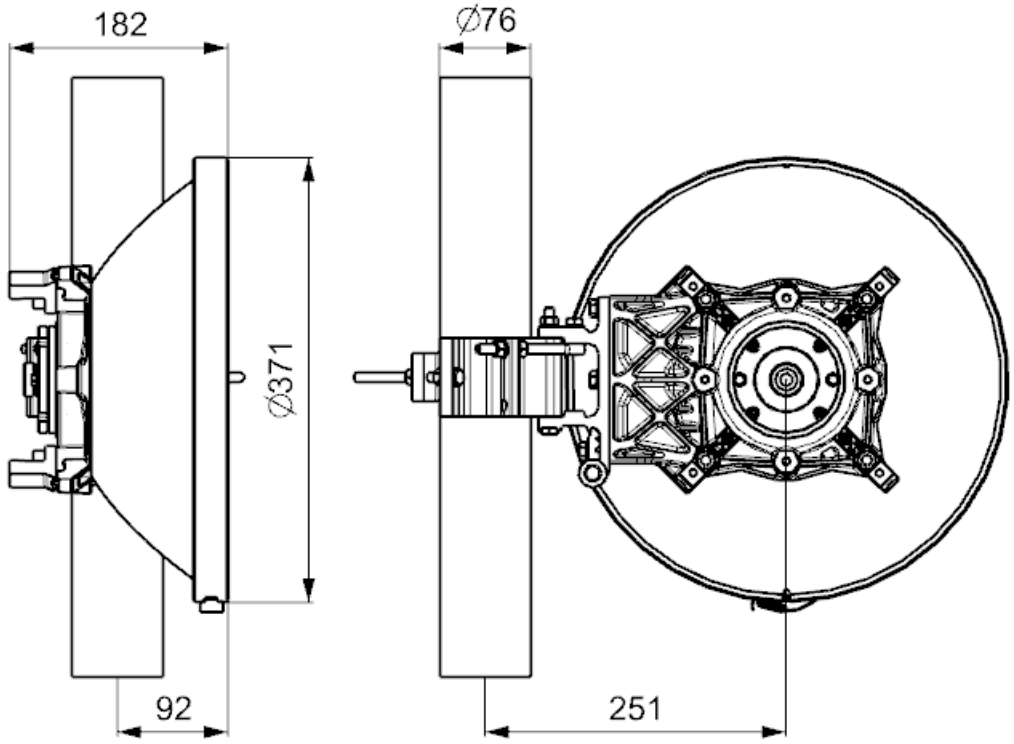
Mechanical data	
Temperature, operational	-45 to +55 °C
Relative humidity	15 to 100 %
Wind load, operational	55 m/s (200 km/h)
Wind load, survival	70 m/s (250 km/h)
Mounting kit, tube diameter	50 – 120 mm
Panning Performance, in azimuth	±15°
Panning performance, in elevation	±15°
Ice load (713 kg/m³)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

Electrical data			
Article number	**HAE110361**	**HAE180361**	**HAE260361**
Frequency range (GHz)	10.0 - 11.7	17.1 - 19.7	24.00 - 26.50
Gain (Low-band) (dBi)	29.0	33.7	36.9
Gain (Mid-band) (dBi)	30.1	34.7	37.0
Gain (High-band) (dBi)	29.7	34.5	36.5
Half power bw (deg)	5.8	3.2	2.3
XPD (dB)	30	30	30
F/B Ratio (dB)	56	62	63
VSWR/Return Loss (dB)	1.33:1/17.0	1.30:1/17.7***	1.30:1/17.7
ETSI Compliance	Class 2	Class 3**	Class 3
FCC Compliance	N/A	Cat B2	Cat B
NSMA file	906-HAE1103-B	906-HAE1803-B	906-HAE2603-C
RPE file	226-HAE1103-A	226-HAE1803-A	226-HAE2603-A
Output flange	Racom Specific *	Racom Specific *	Racom Specific *
Radome type	Flat	Conical	Conical
Weight			
Net weight (kg)	3.9	4.4	4.3
Shipping weight (kg)	5.2	5.7	5.6

***** 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 03M:



Wind forces

10/11 GHz Single Polarized Antenna 03M

Loading to mounting pole @Survival Wind Speed:

Fa: Max Axial Force	359 N
Fs: Max Side Force (without radio equipment)	56 N
M: Max Torque (at pole ø76 mm)	90 Nm

13-38 GHz Single Polarized Antenna 03M

Loading to mounting pole @Survival Wind Speed:

Fa: Max Axial Force	410 N
Fs: Max Side Force (without radio equipment)	56 N
M: Max Torque (at pole ø76 mm)	103 Nm