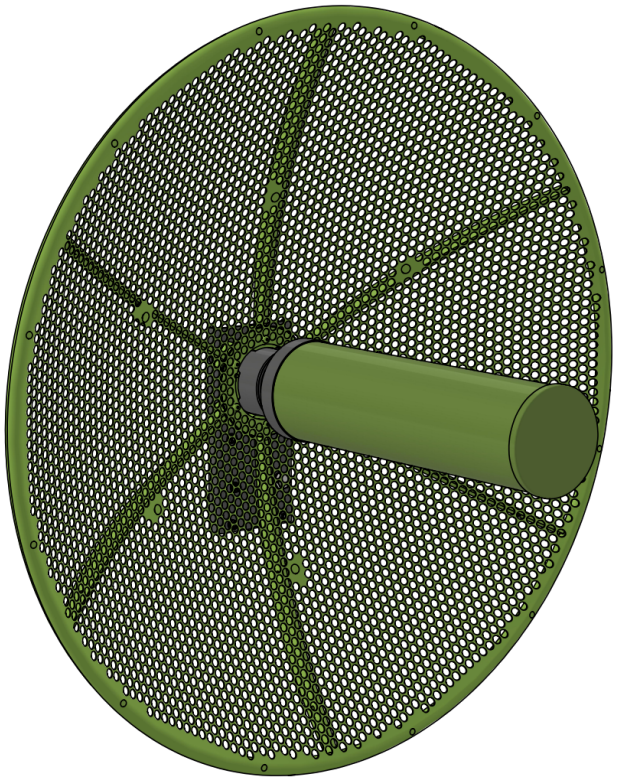
UHF1359P09-Mi

Antenna, Dual-Pol, MIMO, 1.35-2.7 & 4.4-5.875 GHz



Technical Description

- High gain parabolic dish antenna
- Dual-band, dual-polarized feed +/- 90° (H & V)
- Frequency: 1.35 - 2.7 GHz (Band III)
  4.4 - 5.875 GHz (Band IV+)
- Designed for high capacity line-of-sight (HCLOS) MIMO communications
- Removable feed for protection and easy transportation
- Split dish version for reduced stowage volume
- 40mm mast mounting socket
- Rugged high quality antenna with a durable construction
- Optional diplexer - Splits the 2 x dual-band ports into 4 x ports:
  H-POL: 1.35-2.7 GHz and 4.4-5.875 GHz
  V-POL: 1.35-2.7 GHz and 4.4-5.875 GHz

Electrical Specification

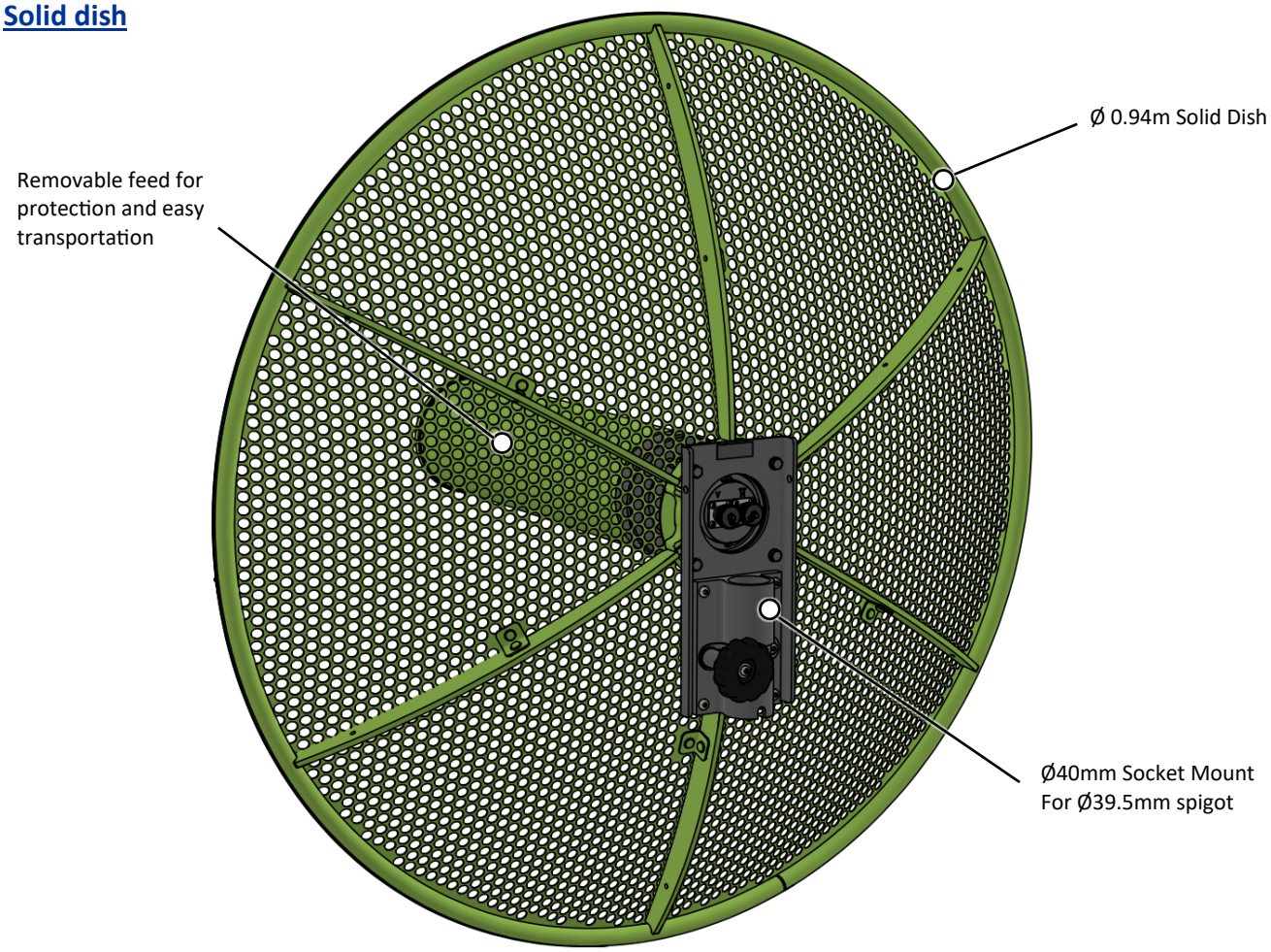
Frequency range	1.35 - 2.7 GHz 4.4 - 5.875 GHz		
Polarization	Horizontal and Vertical		
VSWR *	≤ 2.3		
	Frequency	Nominal	Minimum
Gain (nominal)	1.35 - 2.00 GHz: 2.00 - 2.70 GHz: 4.40 - 5.875 GHz:	19.7 dBi 22.9 dBi 27.6 dBi	18.0 dBi 21.0 dBi 26.5 dBi
Beamwidth (nominal)	1.35 GHz 2.70 GHz 4.40 GHz 5.875 GHz	12.6 deg 6.2 deg 5.0 deg 3.8 deg	14.0 deg 9.2 deg 4.3 deg 3.3 deg
Power rating	10 W CW, simultaneous ports		
Cross polar ratio	> 15 dB, 20 dB typical		
Front to back ratio	> 20 dB		
Isolation	> 20dB, 25 dB typical		
Connectors	Antenna feed - 2 x TNC (f) or 2 x N (f)		

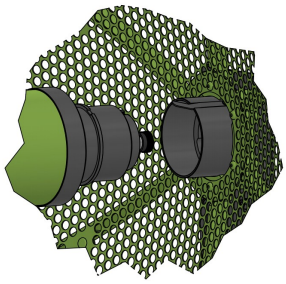
* Meets the stated VSWR across 95% of the band. See plot.

Mechanical Specification

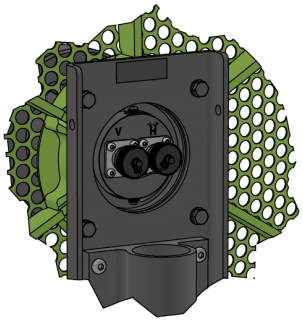
Design	Primary feed parabolic dish antenna. Dish and mounting made in aluminum. Feed in polycarbonate.
Diameter	Ø 0.94 m
Weight (solid dish)	Splid dish: 5.7 kg Split dish: 6.8 kg
Wind load	125 kg @ 200 km/h
Finish	Polyurethane lacquer
Temperature range	-55 °C, +71°C; -67 °F, +160 °F
Mast interface	Ø 40mm socket for Ø 39.5mm spigot

Solid dish

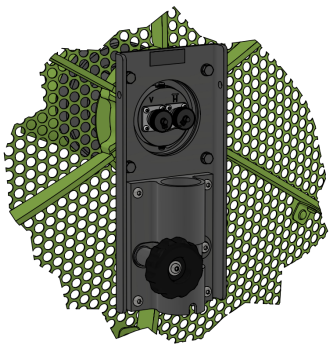




Removable feed for protection and easy transportation

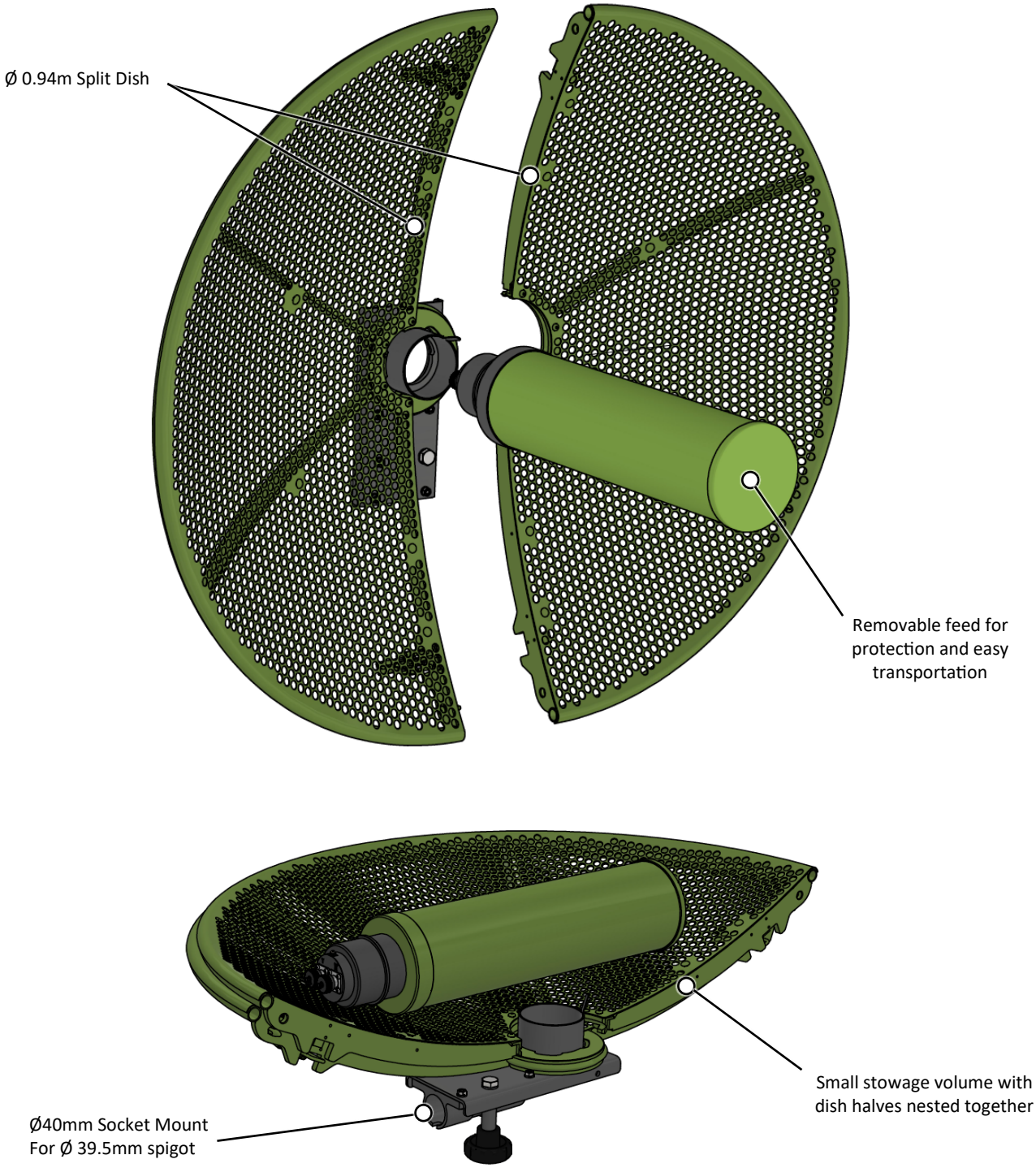


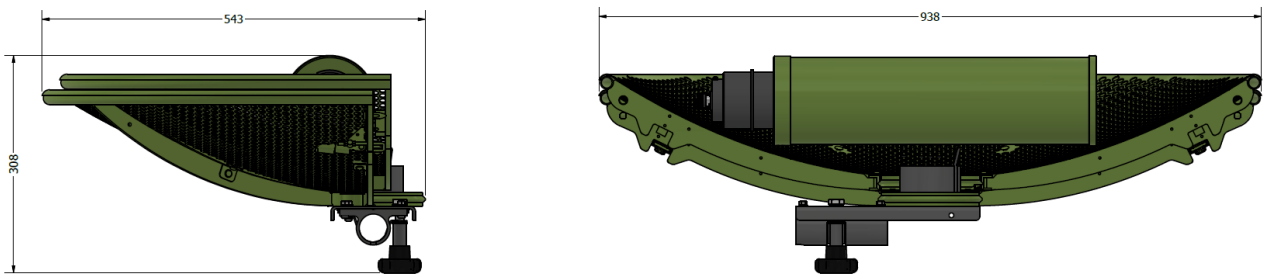
Dual-Polarised



Ø 40mm Socket Mount For Ø 39.5mm spigot

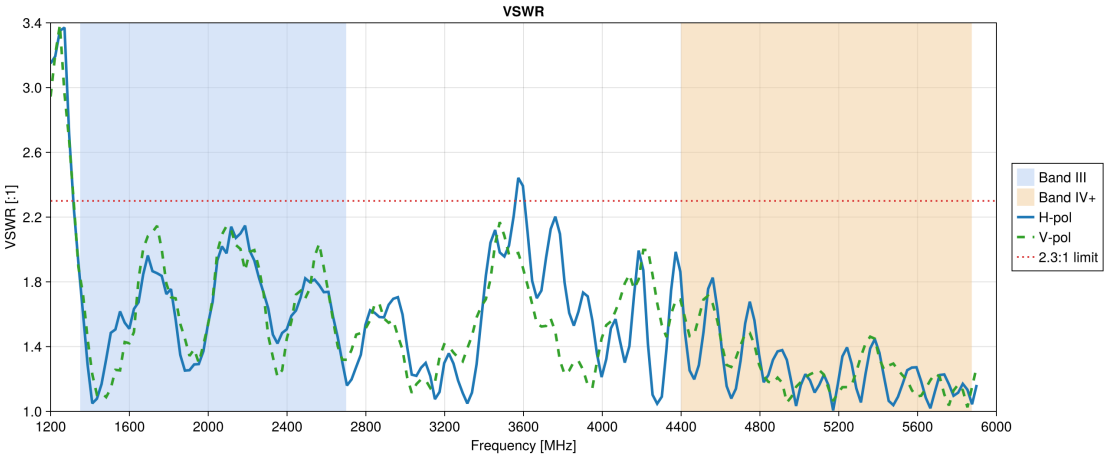
Split dish - Reduced stowage volume



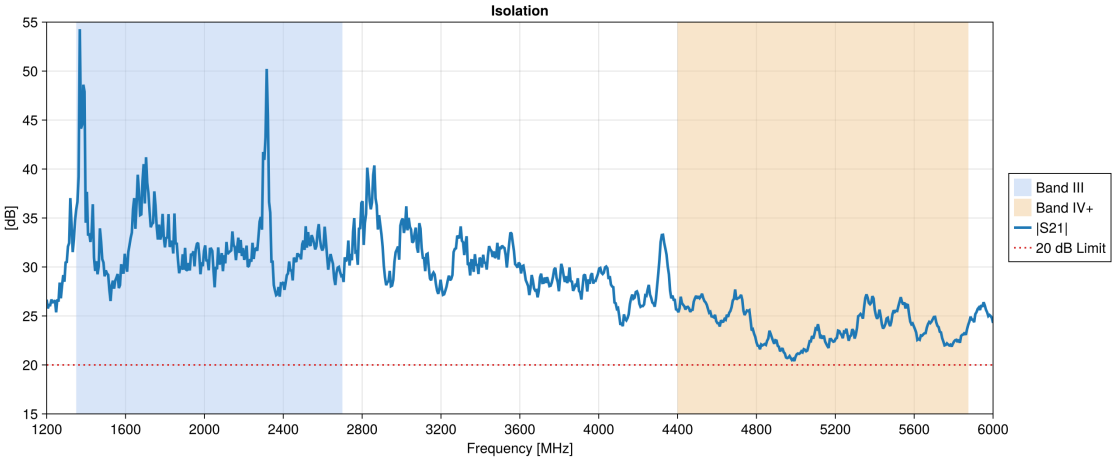


Nominal stowed dimensions

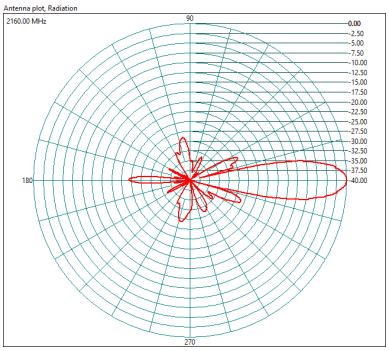
Electrical Plots (typical)



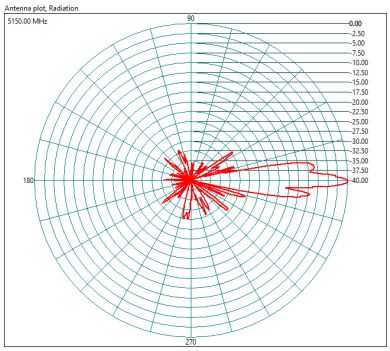
VSWR



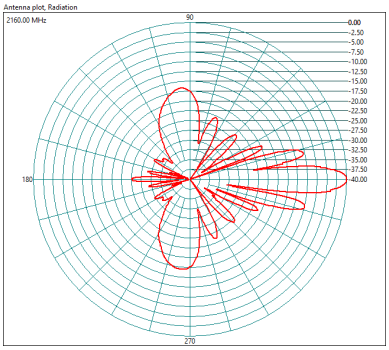
Port to port isolation



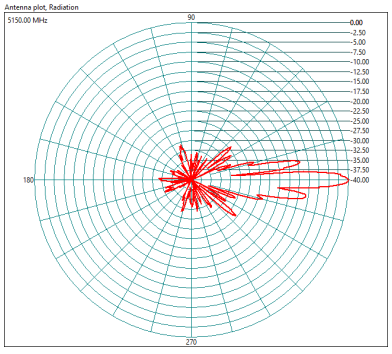
Elevation pattern H-Pol - 2160 MHz



Elevation pattern H-Pol - 5150 MHz



Elevation pattern V-Pol - 2160 MHz



Elevation pattern V-Pol - 5150 MHz