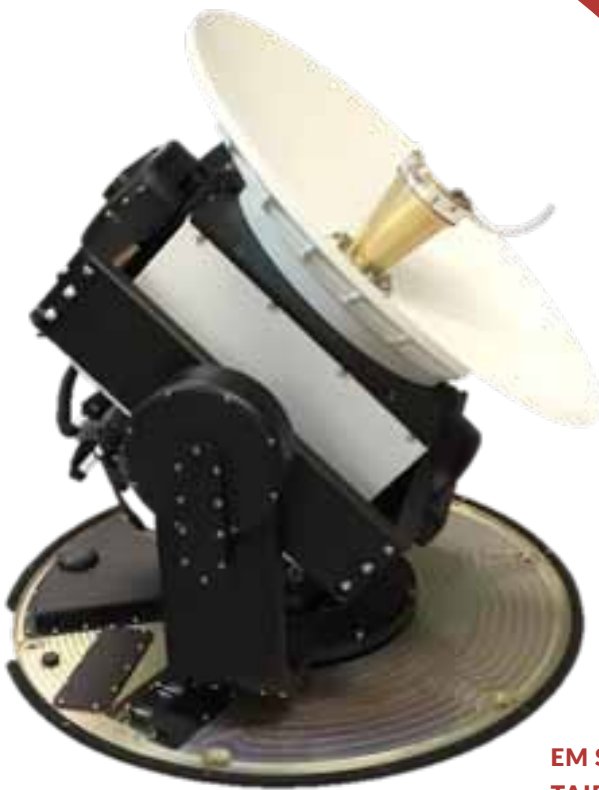


TAIPAN 48cm X-BAND & Ka- DUALBAND ON-THE-MOVE SATELLITE TERMINAL

- Swappable X- and Ka- Band RF assemblies
 - Inmarsat GX compatible
(Certification in process)

Acquires and tracks
satellites in
GPS denied environments



EM Solutions Model No:
TAIPAN-48

TAIPAN-48

X-band and Ka-Dualband Satellite Terminal

EM SOLUTIONS' TERMINAL FAMILY

Designed initially for the Australian Defence Force to operate at Ka-band on WGS satellites, and subsequently tailored for civilian use in emergency services applications, EM Solutions' Taipan satellite terminals affordably combine robust, resilient design and MIL-STD quality with a state of the art antenna feed for operation on either military or commercial Ka-band.

● INCREASED SYSTEM AVAILABILITY

Increased system availability due to best-in-class pointing accuracy, a result of using closed-loop beacon signal processing and tracking. The terminal's proprietary monopulse pointing system minimises the pointing error to near-zero, which preserves the link budget and improves performance on marginal links.

● QUICKEST RE-ACQUIRE TIME

Quickest re-acquire time after obstruction, due to use of an innovative gyro-lock mode that predicts satellite direction during signal loss and readies the unit for immediate operation after the antenna clears the obstruction.

● CONTINUOUS COVERAGE OVER ALL RANGES OF MOTION

The terminal has a three-axis gimbal mount system, eliminating keyhole effect and sync losses when the satellite is close to overhead. Other systems struggle to rotate quickly enough to maintain pointing.

● REDUCED MAINTENANCE AND POWER CONSUMPTION

Reduced maintenance and power consumption due to the use of high life, sealed brushless motors, and the balanced inertial system mass that minimises internal movement of the antenna and reduces power consumption to a mere few watts over the Block Up Converter(s) fitted.



*Similar models shown, not actual.

SPECIFICATIONS

PART NUMBER	01-380A	
Type	X and dual Ka swappable	
Reflector size	48cm	
Radome Height	636mm	
Radome Diameter	640mm	
Base Footprint	550mm	
Reflector Diameter	480mm	
Weight	<70kg with Radome 4 Packages each <25kg. Refer attached ICDs. 5 packages if dual band (X & Ka is required)	
Azimuth Range	360 degrees	
Elevation Range	0 to 180 degrees	
Cross-Elev Range	+/-15 degrees	
Frequency Band	Ka	X
Tracking Accuracy	< 0.2deg	0.2deg
Tx Frequency	29-31 GHz	7.9-8.4
Tx Gain (midband)	45dBi	30dBi
Rx Frequency	19.2-21.2 GHz	7.25-7.75 GHz
Rx Gain	38.6 dBi	28dBi
G/T (Clear Sky, 30 deg)	12dB/K	7dB/K
BUC	EM Solutions 01-360E (25W Psat)	EM Solutions 01-322X (25W Psat)
LNB	EM Solutions 01-317B	EM Solutions 01-284
EIRP (Plinear)	>52dBW	>41dBW
Polarisation	Circular, electronically switchable	Circular, mechanically switchable
Reference	Internal	
Environmental	MIL-STD-810G	
EMI/EMC	MIL-STD-461F	
Temperature (Operating)	-40degC / +55degC	
MTBF	59000 hours (Telcordia Method - 40degC ground benign)	
INDOOR UNIT		
Dimensions (WxDxH)	Refer attached ICD	
Modems Supported	Connection for up to 4 x L-Band IF Modems	
Modem Interface	L-Band	
Management	Ethernet / SNMP	
Power Requirement	AC 90-265V via Indoor Unit (24VDC / 48VDC Options available on request)	
Power Consumption	<350W	

TAIPAN-48

Sample ICD – Swappable Taipan Terminal

