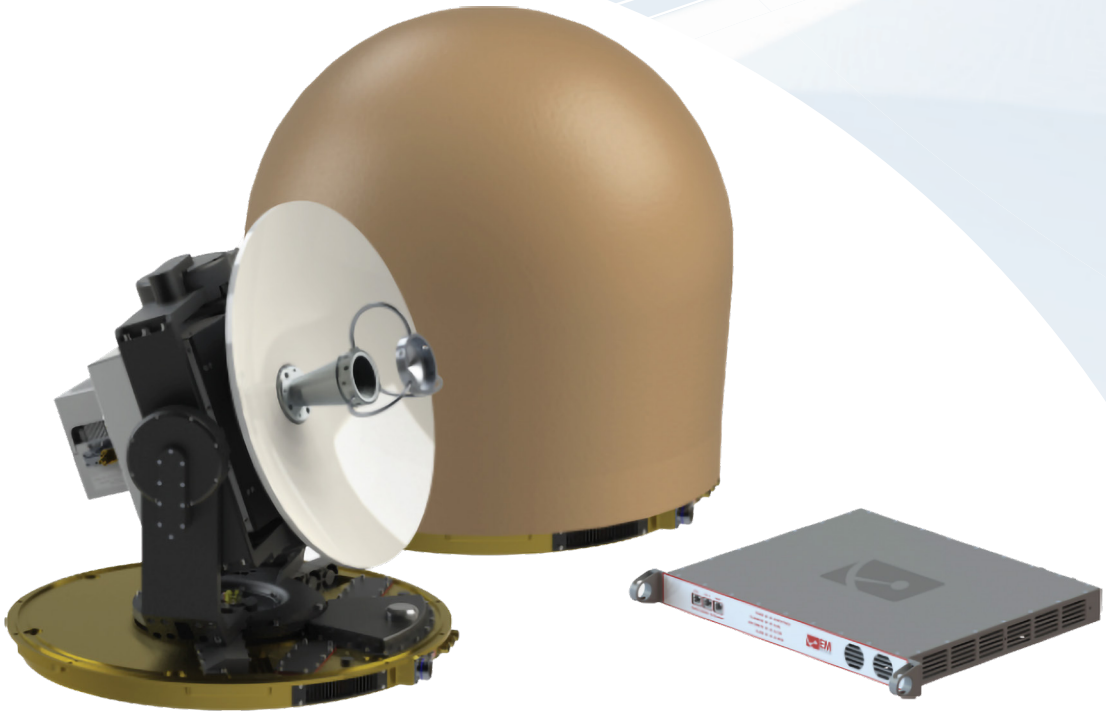
TAIPAN 48cm Ka DUALBAND
ON-THE-MOVE SATELLITE TERMINAL

Inmarsat GX certified



EM Solutions Model No:
TAIPAN-48

PRODUCT INFORMATION
& SPECIFICATIONS

EM SOLUTIONS
A COHORT PLC COMPANY

EM Solutions Pty Ltd
Tel: +61 7 3414 0700
sales@emsolutions.com.au
www.emsolutions.com.au

TAIPAN-48

Ka Dualband Satellite Terminal

EM SOLUTIONS' TERMINAL FAMILY

Designed for both military and civilian use in challenging environments and for users requiring wideband communications on the move, 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 satellites.

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.

SPECIFICATIONS	Ka-BAND MILITARY	Ka-BAND COMMERCIAL
Antenna Size	48cm (nom)	
RF Frequency	Rx: 20.2 to 21.2 GHz Tx: 30.0 to 31.0 GHz	Rx: 19.2 to 20.20 GHz Tx: 29.0 to 30.0 GHz
	Switchable between Commercial and Military operating bands via Web Interface	
G/T (10° elevation)	>12dBK	
EIRP (linear) (fitted with EM Solutions 01-360E 16W/25W Ka Multiband Diamond Series BUC)	>52dBW (25W) >50dBW (16W)	
Polarisation	Circular	
Pointing Error	<0.2deg	
Radome Size	640mm diameter x 650mm height	
Base Footprint	550mm diameter	
Weight	<60kg	
Power Consumption	<300W	
Environmental	Tested in accordance to MIL-STD-810G	
Supply Voltage	90-264V AC	
Pedestal Type	3 axis, Az 360^{O} continuous, EL 0^{O} to 180^{O}, XEL $\pm 15^{O}$	
Tracking Type	Monopulse tracking on Ka-band Beacon	
INU & Gyros	Embedded	
Modem support	Two L-Band modem ports available.	
EMI/EMC	MIL-STD-461 F	
Interoperability	MIL-STD-188-164 A	