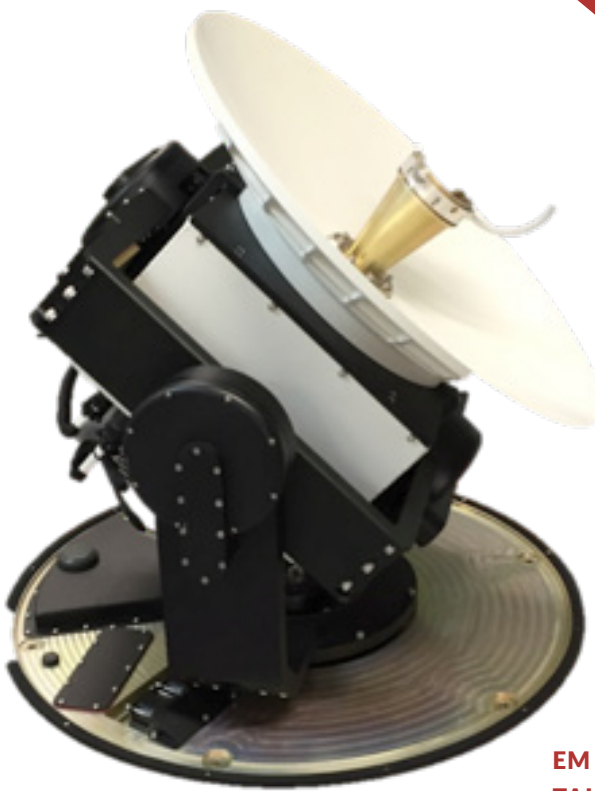


TAIPAN 48cm Ka DUALBAND ON-THE-MOVE SATELLITE TERMINAL



EM Solutions Model No:
TAIPAN-48

TAIPAN-48

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**

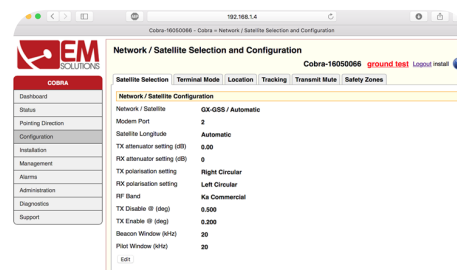
Quickest re-acquire time after obstruction, due to use of an innovative gyro-lock mode that predicts satellite direction during signal loss and readies the unit for immediate operation after the antenna clears the obstruction.

- **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.

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SPECIFICATIONS

| 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 01-360A 25W Ka Multiband Diamond Series BUC) | >52dBW | |
| Polarisation | Circular (electronically switchable) | |
| Pointing Error | <0.2deg | |
| Radome Size | 640mm diameter x 650mm height | |
| Base Footprint | 550mm diameter | |
| Weight | <57kg | |
| Power Consumption | <300W | |
| Environmental | Tested in accordance to MIL-STD-810G CN1 and IEC 60945:2002 | |
| Supply Voltage | 90-264V AC | |
| Pedestal Type | 3 axis, Az 360° continuous, EL 0° to 180°, XEL ±15° | |
| Tracking Type | Monopulse tracking on Ka-band Beacon | |
| INU & Gyros | Embedded | |
| Modem support | Two L-Band modem ports available. | |