

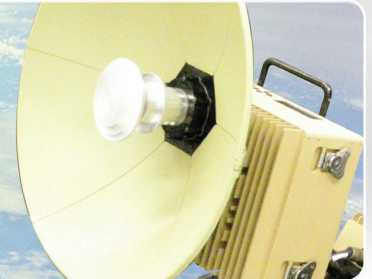
SATELLITE TERMINALS

TEST EQUIPMENT

COMPONENTS

CUSTOM ENGINEERING

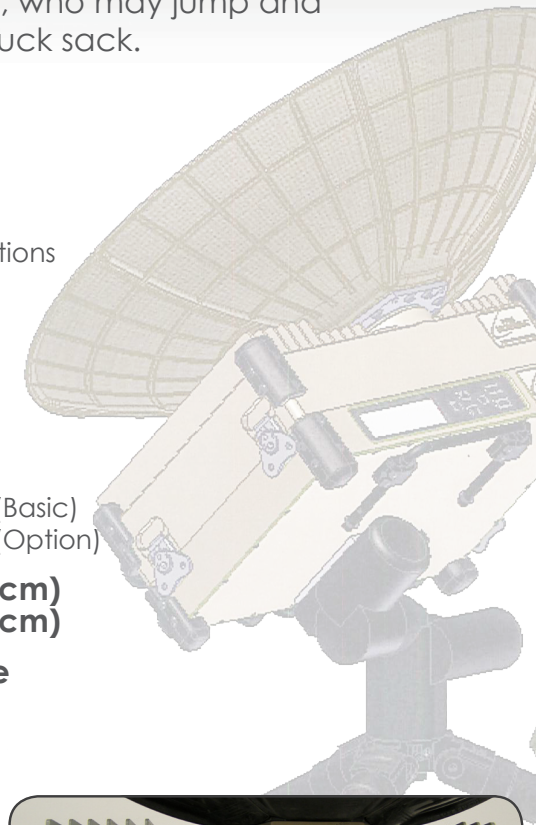
TM-Ku850MP KU-BAND MANPACK SATELLITE TERMINAL



Tampa Microwave's TM-Ku850MP was specifically designed from the ground up for the dismantled soldier who will operate in inhospitable territory, who may jump and then carry the manpack in his ruck sack.

Key Terminal Features

- **No Fans** – Passively cooled
- **Auto Assist Pointing** – Simple front panel display instructions assist satellite acquisition
- **High Performance** – Low loss
 - **G/T (20 deg elevation)**
 - 65 cm Antenna = 14.2 dB/K
 - 90 cm Antenna = 17.1 dB/K
 - **EIRP (P1dB)**
 - 65 cm Antenna = 46.3 dBW (Basic)
 - 90 cm Antenna = 49.3 dBW (Option)
- **System weight = 27 lbs. (65 cm)
= 30 lbs. (90 cm)**
- **Extremely field configurable**
 - No tools required
 - X, Ku or Ka transceivers
 - Quick-release 65 or 90cm antenna
- **Internal GPS**
- **NVG Compatible**
- **MIL-STD-810F tested**
- **Operational temp -20 to +55C**



Integrated iDirect Modem

Key Discriminators:

High Performance

Uplink 1-2 Mbps and
Downlink 4-6 Mbps

Battery Savings Mode

Transmitter Keyline control
more than doubles battery
operation time

Multi-Band

Quick change between X
and Ku bands (10 lbs. for 2nd
receiver/transmitter)

Simple to Operate

Auto-assist display provides
"BGAN like" setup (that an
unskilled operator can use to
point at the satellite)

MIL-SPEC Reliability

Purposely built for tactical
environment (MIL-STD-810F)

Lightweight

Monolithic RF design requires
no cooling fans providing
smallest, lightest, most reliable
terminal available

In Production

In production June 2011

Contracts Available

Call us for options

Technical Performance Characteristics

Terminal	Specification
Modem & Transceiver Backpack Carrying Case Hardened Case	12" x 8" x 4" W x D x H 20" x 12" x 7" 21.7" x 14.1 x 8.9"
Weight (less case)	17 lbs. Mast-mounted 27 lbs. Total System (65 cm) 30 lbs. Total System (90 cm)
Power Input	85 – 265 VAC, 47-440Hz 10 – 36 VDC External battery (Not Included)
Battery Run-time	70 min using one (1) BB-2590 Greater than 2 hours when using keyline feature
Operating Frequency (Ku Band)	Uplink: 13.75 – 14.5 GHz Downlink: 10.95 – 12.75 GHz
Operating Temperature Range	-20 to +55 deg C
G/T - (20 deg elevation angle)	65 cm Antenna - 14.2 dB/K 90 cm Antenna - 17.1 dB/K
EIRP - P1dB	65 cm Antenna - 46.3 dBw 90 cm Antenna - 49.3 dBw
Modem	
iDirect	e850MP board integrated
Any external L-Band modem	Using external L-Band connections
GPS Antenna	Remote-able GPS antenna for obstructed use
Interfaces	1 Mil-Std, MS-3112, 10-pin Power Connector 2 RJ45 Ethernet Ports 1 RJ45 Console Port 1 L-Band Monitor Port L-Band RF Connections for External Modem
Environmental Temperature Humidity Vibration Salt Fog Sand and Dust Shock Blowing Rain	MIL-STD-810F -20 to +55C 95 %, Condensing Method 514.4 Method 509.4 Method 510.4 Method 516.5 Procedure II Method 506.4

Packaging Options



Option A:
Roll-away hard case, FAA
overhead compliant (Black).



Option B:
Roll-away soft case, with
backstraps, FAA overhead
compliant (Black).



Option C:
Small rucksack, FAA overhead
compliant (Black, Desert Tan,
and OD green).



Option D:
Airline checkable and
shipping hard case, for
manpack and rucksack (Black,
Desert Tan, and OD green).



Option E:
Mast Mount, replaces
Tri-pod for fixed installation.



Option F:
65cm parabolic reflector
and feed. Replaces the
45cm antenna.