

## Tactical Communications | Ultra .85 Dual Maritime

Ultra is the first dual-use VSAT terminal that has high speed, hyper-accurate auto-acquire and tracking technology using differential GPS. Lightweight, IP 65 compliant and capable to operate in 30 mph winds Ultra is airline transportable, easily set up and fully operational by one person without the use of tools in under ten minutes in ground mode.

One system serves as a maritime or fly away solution providing war fighters with the right terminal for any mission. Change between modes in less than 15 minutes, Band changes are completed in less than 10 minutes in ground or maritime mode and a .85 terminal can be converted to a 1.3Meter terminal in less than 10 minutes.

Ultra is capable of operating in X-, Ku-, Ka-Mil, and commercial Ka-Band, and can be configured for preset blockage areas as well as on the fly blockages such as bridges while at sea. With a redundant antenna, and shared modem passing RF over fiber the secondary terminal will complete the traffic handover with as little as one byte loss. Also Ultra has a proven ability to pass modem traffic via MANET technology to backside services.

With design features that include an embedded modem, IP I/O data port, embedded Web based GUI, and ability to operate around the globe, Ultra is the most flexible communication terminal in the modern warfighters arsenal. Furthermore, Ultra is field-proven across a variety of DoD organizations with different skills and missions, including the U.S. Army, U.S. Joint Forces and Combined Forces, U.S. Air Force and U.S. Navy.



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### **Specifications**

| Weight (lbs)      | 250         |  |
|-------------------|-------------|--|
| Cases             | 3           |  |
| Setup             | 2 Person    |  |
| Setup Time        | 45 Minutes  |  |
| Pointing Accuracy | +/5 degrees |  |
| Satellite Lock-up | <2 minutes  |  |
| Fully Operational | 60 Minutes  |  |

### **Parts Numbers**

| Dual Maritime<br>System | 40-3283-01 |  |
|-------------------------|------------|--|
| X-Band Kit              | 40-3286-01 |  |
| Ku-Band Kit             | 40-3287-01 |  |
| Ka-Band Kit             | 40-3288-01 |  |
| Unit Training           | UL-TRAIN   |  |
| Fiber                   | 40-3285-01 |  |
| Radome (Fabric)         | 40-3284-01 |  |
| Spares Kit              | 40-3289-01 |  |

| Mid-Frequency Performance |                 |                   |                    |                 |  |  |
|---------------------------|-----------------|-------------------|--------------------|-----------------|--|--|
| Parameter                 | X-Band          | Ku-Band           | Ka-Com             | Ka-Mil          |  |  |
| Frequency Band, Rx        | 7.25 - 7.75 GHz | 10.95 - 12.75 GHz | 19.2 - 20.2<br>GHz | 20.2 - 21.2 GHz |  |  |
| Frequency Band, Tx        | 7.90 - 8.40 GHz | 13.75 - 14.50 GHz | 29.0 - 30.0 GHz    | 30.0 - 31.0 GHz |  |  |
| LNB Noise Temperature     | 52.3 K          | 60 K              | 120 K              | 120 K           |  |  |
| G/T at 10° EL, 25°C       | 13.0 dB/K       | 17.4 dB/K         | 18.4 dB/K          | 18.8 dB/K       |  |  |
| G/T at 20° EL, 25°C       | 13.3 dB/K       | 17.7 dB/K         | 18.8 dB/K          | 19.1 dB/K       |  |  |
| G/T at 30° EL, 25°C       | 13.4 dB/K       | 17.9 dB/K         | 18.9 dB/K          | 19.4 dB/K       |  |  |
| EIRP at Saturation Power  | 48.4 dBW        | 53.7 dBW          | 58.6 dBW           | 59.0 dBW        |  |  |
| Gain at Rx                | 34.0 dBi        | 38.2 dBi          | 42.3 dBi           | 42.8 dBi        |  |  |
| Gain at Tx                | 34.6 dBi        | 39.9 dBi          | 45.8 dBi           | 46.2 dBi        |  |  |

### **Dual Maritime System includes:**

Two Ultra .85 M antenna with Band selected RF package Fiber Conversion Kit, two fiber switches and fiber reel

Two Fabric Radomes

Use internal or external modem.

Remove maritime base,

attach legs and use as a independant fly away terminals.



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Cases are designed to be carried through hatches and be manuvered throughout the vessel to include ladderwells and narrow halls.

RF over conversion for near seamless handover between primary and secondary terminals. Loss as small as one byte.

Transceiver

Available in X, Ka, and Ku

Optional IP Optimization Cisco WAAS IP Acceleration on Comtech Convoy Router Server Module

**About Comtech** 

Protocols Supported TCP, UDP, ICMP, RIP v2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, Open AMIP, cRTP and GRE

Comtech Telecommunications Corp. (Nasdaq: CMTL) designs, develops,

communications markets. For more information visit www.comtechtel.com.

produces and markets innovative products, systems and services for

advanced communications solutions. The Company sells products to

a diverse customer base in the global commercial and government

Ground / Flyaway

Petals 6 Interchangeable petals

#### iDirect e850mp

Tx Out: Type-F, 950-2000 MHz Rx In: Type-F, 950-2000 MHz Rx Out: Type-F, 950-2000 MHz LAN-: Single 10/100 Mbps Ethernet Console: RS-232 Console Connection GPS: Input or Antenna Controls Supported 10 MHz External Reference Clock

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