

## Data Controller 850

### Compact, USB-Connected Data Controller for Networking Tactical Radios

#### Are You Getting the Picture? (Over Your Combat Net Radio)

The Viasat VDC-850 delivers the Common Operating Picture over your existing combat net radio in a compact, lightweight package with plug-and-play USB connectivity.



The Viasat Data Controller 850 (VDC-850) enables secure data networking using any combat net radio and handheld computer. Combat users can quickly connect this Viasat data controller via USB to send notes and files, and run IP applications over tactical radios.

The Viasat VDC-850 offers interoperability and flexibility for any kind of tactical mission. It features a powerful error correction algorithm to transmit images and other data over noisy half-duplex, low data-rate radio communication channels.

For error-free data sharing over native MIL-STD-188-184 and noisy radio channels, this data controller includes Viasat eMail® application software. With an intuitive, streamlined interface, Viasat eMail application enables warfighters to efficiently and quickly send chats, files, emails, photos, map overlays, and other documents. Viasat Data Controller IP software is also available for operating IP-based applications (POP3, SMTP, FTP, HTTP, etc.) over tactical radios.

Warfighters can use the Viasat VDC-850 to transmit Android and Windows Tactical Assault Kit core data elements for military interoperability, including direct fire mission, Blue Force Tracking, surveillance results, and airspace deconfliction information.

Lab and field tests have repeatedly verified that Viasat Data Controllers are the highest-performance system for sending data over tactical radios. Count on the Viasat VDC-850 to network tactical radios into the Common Operating Picture.

### VIASAT VDC-850 AT-A-GLANCE

#### Compact and Lightweight

- » Ergonomic design; fits easily into the palm of your hand
- » 12 oz; lightweight, durable material

#### USB Connectivity

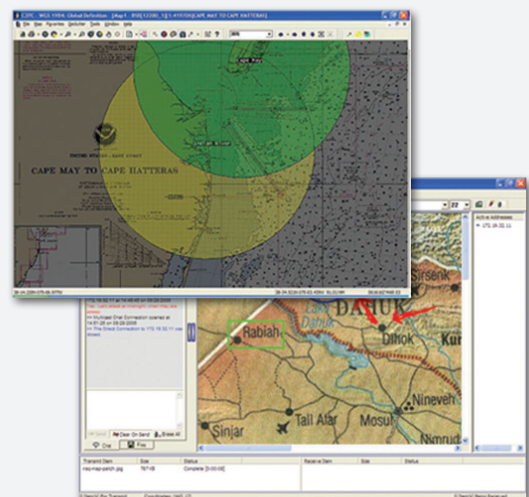
- » High-speed, plug-and-play USB interface

#### Optimized for Noisy Channels

- » Efficient messaging and data sharing over native MIL-STD-188-184 with Viasat eMail® notes and files application
- » Off-the-shelf IP-based application support software (optional)
- » Powerful error correction

#### Combat Comms Enabled Over Radio

- » Situational awareness
- » Whiteboard collaboration
- » Chat
- » Messaging
- » Email
- » ATAK & WINTAK interoperable



# Viasat VDC-850 USB Data Controller

## SPECIFICATIONS

### GENERAL CHARACTERISTICS

Operating Modes	Half-duplex, full-duplex, simplex
Channel Rate	Up to 128 kbps
Channel Types	SATCOM, LOS, HF, wired
Protocol	MIL-STD-188-184
Compatible Devices	KY-57/58, KY-99/99A/100, KG-84 A/C, KIV-7, KIV-7M, STU-III, STE, AN/PRC-117, PRC-148, PRC-152 Family of Radios, PRC-162, ARC-210 Family of Radios

### PHYSICAL CHARACTERISTICS

Dimensions (W x H x D)	5.9 x 1.4 x 2 in.; 150 x 30 x 50 mm
Weight	12 oz

### INTERFACES

Data Interface	USB 2.0
COMSEC Interface	MIL-STD-188-114A, RS-232 (single-ended); MIL-STD-188-114A, RS-422 (balanced data & clock only)

### COMSEC Data Rates

- » Synchronous Up to 128 kbps
- » Asynchronous Up to 115200 kbps

### POWER

Power Options	USB Bus Power or External Supply
USB Bus Power	5 V, 500 mA (supplied by USB host)
External Supply	8 to 30 VDC
Power Consumption (Typical)	950 mW operation; 475 mW auto power down

### ENVIRONMENTAL

Operation Temperature	-35° to +60° C
Storage Temperature	-35° to +71° C
Immersion	IP-X5 water resistant
Vibration	20 Hz to 2 KHz, 0.06 g <sup>2</sup> /Hz; MIL-STD-810F, Method 514.5, Category 24
Shock	40 G; MIL-STD-810F, Method 516.5, Procedure I

### OPERATING SYSTEMS

Windows 10, Microsoft Windows 7 32-bit, Windows 7 64-bit\*, Android

## COMMON OPERATING PICTURE TO THE TACTICAL EDGE

