Compact, USB-Connected Data Controller for Mobile User Objective Systems (MUOS) to Legacy Gateway Component (MLGC)



Are You Getting the Picture? (Over Your Legacy SATCOM Terminals Radio)

The Viasat VDC-850 delivers seamless interoperability to the MLGC in a compact, lightweight package with plug-and-play USB connectivity.

The Viasat Data Controller 850 (VDC-850) enables secure data interoperability between Legacy UHF SATCOM radios and Mobile User Objective System (MUOS) WCDMA radios. 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 is the only MUOS to Legacy Gateway Component (MLGC) approved data controller for tactical UHF SATCOM missions requiring MUOS to Legacy interoperability. It features a powerful error correction algorithm to transmit data over noisy half-duplex, low data-rate radio communication channels.

For error-free data sharing over MLGC, Viasat uses MIL-STD-188-184 based hardware powered by VDC/IP and ViaBoard software. With an intuitive, streamlined interface, the Viasat VDC/IP communications software and ViaBoard application enables warfighters to efficiently and quickly send group chat, files, emails, photos, map overlays, and other documents.



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 UHF SATCOM Channels

- » Efficient messaging and data sharing over traditional UHF and WCDMA SATCOM channels using MIL-STD-188-184 with Viasat VDC/IP and ViaBoard application software
- » Powerful and robust error correction

Secure Communications Enabled Over UHF SATCOM Radio

- » Secure situational awareness access
- » Secure whiteboard collaboration applications
- » Secure group chat
- » Secure SIPRNet/NIPRNet
- » Support for 3rd Party IP

Ordering Information

PN: 1189604 VDC-8501

PN: 1355126 VDC/IP Win10 64 Bit Software 1

PN: 1288773 ViaBoard Win10 64-Bit IP

Application Software²

PN: 1354602 Generic RS-232 (DB-25)³

PN: 1175460 RS-232 Unbalanced Unterminated³ PN: 1347904 RS-422 Balanced Unterminated³

PN: 1175508 PRC-117G³ PN: 1354633 PRC-148³

PN: 1175049 PRC-152/152A/1583

PN: 1352567 PRC-162³ Ch 1 PN: 1448100 PRC-162³ Ch 2

PN: 1352568 PRC-163/167³

¹ Required to access MLGC data

 $^{\rm 2}$ Optional end user IP application software for use with both Legacy and MUOS radios

³ Requires a cable to connect the VDC-850 to your specific radio

SPECIFICATIONS

GENERAL CHARACTERISTICS

Operating Modes Half-duplex, full-duplex, simplex

Channel Rate Up to 128 kbps

Channel Types UHF SATCOM, UHF LOS, VHF, HF and wired

MIL-STD-188-184 Protocol

KY-57M/58M, KY-99M/100M, KG-84 A/C, KIV-7M, **Compatible Devices**

AN/PRC-117X, PRC-148, PRC-152X, PRC-158, PRC-162, PRC-163, Viasat RT-18XX Family of Radios, ARC-210 Family of Radios, and Other Legacy UHF

SATCOM 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)

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

-35° to +60°C **Operation Temperature** Storage Temperature -35° to +71°C **Immersion** IP-X5 water resistant

Vibration 20 Hz to 2 KHz, 0.06 g²/Hz; MIL-STD-810F,

Method 514.5, Category 24

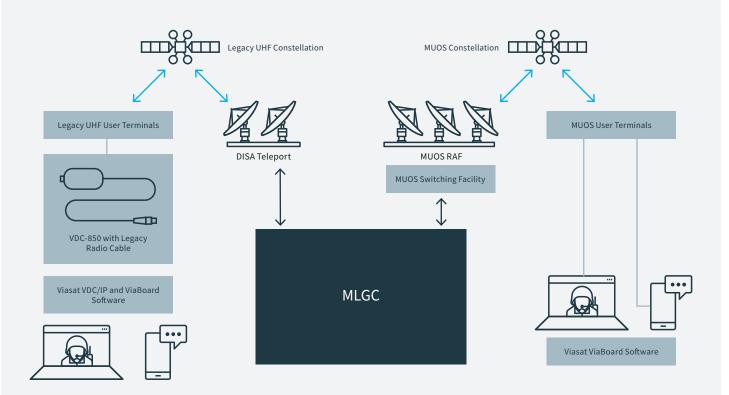
40 G; MIL-STD-810F, Method 516.5, Shock

Procedure I

OPERATING SYSTEMS

Windows 10 and Android

MOBILE USER OBJECTIVE SYSTEM (MUOS) TO LEGACY GATEWAY COMPONENT (MLGC)



CONTACT

EMAIL insidesales@viasat.com

TECHNICAL SUPPORT

TEL 888 842 7281 (US Toll Free)

TEL 888 272 7232 (US Toll Free) or +1 760 476 2600 EMAIL noc-carlsbad@viasat.com

WEB www.viasat.com/products/terminals-and-radios/vdc

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