

Viasat VDC-800 Data Controller

The VDC-800 PC Data Controller connects via USB to laptop computers and handheld computing devices to enable secure IP access. The VDC-800 advances the ViaSat "IP to the Tactical Edge" approach to military communications by adding the high-speed, plug-and-play USB interface to the ViaSat Data Controller family. This USB data controller extends IP and TCP/IP networking to the military personnel on the frontline.



The VDC-800 can connect to the USB of a computer or handheld device and be used with any current tactical radio to run IP-based critical combat communications applications, such as Situational Awareness, whiteboard collaboration, chat, messaging and email, almost as if they were at their own desktop computer. The VDC-800 can also be used to transmit Cursor on Target core data elements for military interoperability, including direct fire mission, blue force tracking, surveillance results, and airspace deconfliction information.

Ruggedised to MIL-STD-810F, the VDC-800 offers, interoperability and flexibility for any kind of mission. It features powerful error-correction to transmit images and other data over noisy half-duplex, low data rate radio communication channels. This USB Data Controller creates network-centric connections that link the frontline operatives to the Common Operational Picture.

The unit can be powered directly from a computer's USB bus, the removable rechargeable battery or an external DC power supply. The VDC-800 will operate with both full Windows and Windows CE devices and is fully interoperable with all of ViaSat's existing data controllers. Future features will be supported through field downloadable upgrades.

Key Features

- Half-duplex, full-duplex, simplex
- Up to 128 kbps
- SATCOM, LOS, HF, wire-line
- MIL-STD-188-184, MIL-STD-188-184A (future)
- USB 2.0, USB On-The-Go 1.0a
- Operating -31°C to 60°C
- Storage -35°C to 71°C



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Specifications



FUNCTIONAL

Operating Modes	Half-duplex, full duplex, simplex
Channel Rate	Up to 128 kbps
Channel Types	SatCom, LOS, HF, wireline
Protocol	MIL-STD-188-184, MIL-STD-188-184A (future)
Compatible Devices	AN-CSZ-1A, KY-57/58, ANDVT Tacterm, KY-99/99A/100, KG-84 A/C, KIV-7, STU-III and STE

PHYSICAL CHARACTERISTICS

Dimensions (WDH)	5.3 inches x 2.1 inches x 1.2 inches
Weight	12 ounces

INTERFACES

Data Interface	USB 2.0, USB On-The-Go 1.0a
COMSEC interface	Single-ended: MIL-STD-188-114A, RS-232 Balanced: MIL-STD-188-114A, RS-422 (balanced data & clock only)
COMSEC Data Rates	Up to 128kbps (synchronous/ asynchronous)

POWER

Power Options	USB Bus Power, Removable Rechargeable Battery, External Supply
USB Bus Power	5V, 500mA (suuplied by USB host)
Removable Rechargeable Battery	3.6V, 2000mAh (spares available from ViaSat)
External Supply	8 – 30V D.C.
Power Consumption (Typical)	Charging Battery: 7W; Operational: 950mW; Auto Power Down: 475mW

ENVIRONMENTAL

Operation Temperature	-31°C to 60°C
Storage Temperature	-35°C to 71°C
Immersion	2 meter; MIL-STD-810F, Method 512.4
Vibration	20Hz-2KHz, 0.06 g2/Hz; MIL-STD-810F, Method 514.5, Category 24
Shock	40G; MIL-STD-810F, Method 516.5, Procedure I

Any Radio + ViaSat Data Controller = Secure IP... Today!



Rugged Systems is one of Europe's leading suppliers of rugged, mobile computer, display and communications solutions and services. Specialising in applications such as test & measurement, command and control, data acquisition, secure data & computing, TEMPEST and ultra-reliable message transfer over noisy tactical communication channels. The company strives to be innovative and provide cost effective solutions, through many years of knowledge and experience

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