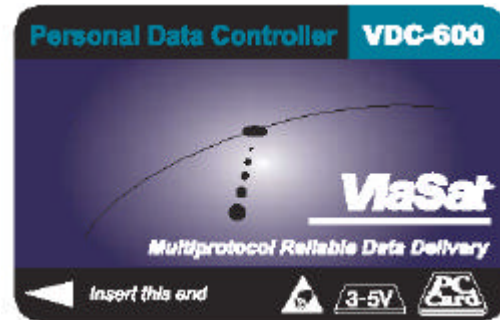


Viasat VDC-600 Data Controller

The VDC-600 PC Data Controller is a type II card that complies with PC Card Standard Release 8 for compatibility with the latest mobile PCs. The advanced design of the VDC-600 draws less than 600 mW of power when operating at 3 Volts with unbalanced signaling, requiring no external power supply or additional batteries. The PC Data Controller operates over UHF SatCom, UHF line-of-sight, VHF, HF, INMARSAT and wireline channels.



The VDC-600 supports networks of up to 64 users per channel with point-to-point, multicast, and broadcast messages. This data controller is fully compliant with MIL-STD-188-184, meets NDI and COTS requirements, and is backwards compatible with all ViaSat data controllers and Data Terminal Software. The VDC-600 will also work with MIL-STD-188-220 software, and will support MIL-STD-188-184A, once the standard is approved.

The VDC-600 uses data compression to reduce the size of user messages and shorten transmission times. Data from the user is automatically compressed before transmission and restored at the receiving end. The data compression algorithm typically shrinks text files to less than 50% of their original size. It even detects "incompressible" user data and sends it unaltered.

Messages can be addressed to a single destination or multicast, with acknowledgements automatically collected and displayed by the originating terminal. Simplex broadcast messages are also available. Many users can share a single channel using the built-in cooperative carrier sense multiple access (CSMA) protocol to avoid collisions from simultaneous transmissions or an enhanced channel access protocol for more efficient sharing of a radio channel.

Key Features

- Single Type II PCMCIA card
- Low cost
- Enhanced Error Correction
- Built-In Networking
- Upgrades with Flash ROM
- Hands-Free Control
- Real Time Data Compression

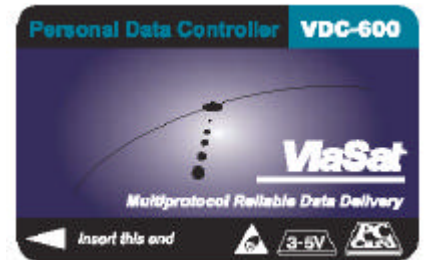


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Viasat VDC-600 Data Controller

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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
Network Size	Up to 64 users per channel
Message Connectivity	Point-to-point, multicast, broadcast
Channel Access	CSMA, Instant-On, shared
Compatible COMSEC Devices	AN-CSZ-1A, KY-57/58, ANDVT Tacterm, KY-99/99A/100, KG-84 A/C, KIV-7, STU-III, STE and others

INTERFACES

Data Interface	PC Card Standard Release 8
COMSEC Interface	Unbalanced MIL-188-114 and RS-232 compatible Balanced MIL-188-114 and RS-232 compatible (data and clock only)
Operating Systems	All PCMCIA Type II PCs: DOS, Windows 3.1x, Windows 95, Windows 98, Windows NT4*, 2000, XP and Pocket PC (* Operation under Windows NT4 requires Touchstone Cardware card support software)

ENVIRONMENTAL

Temperature	Operating temperature 0°C - 50°C Storage Temperature -30°C - 50°C
Humidity	Conformal coated

PHYSICAL

Dimensions	PCMCIA type II form factor
Weight	5 oz
Volume	1 cubic in.

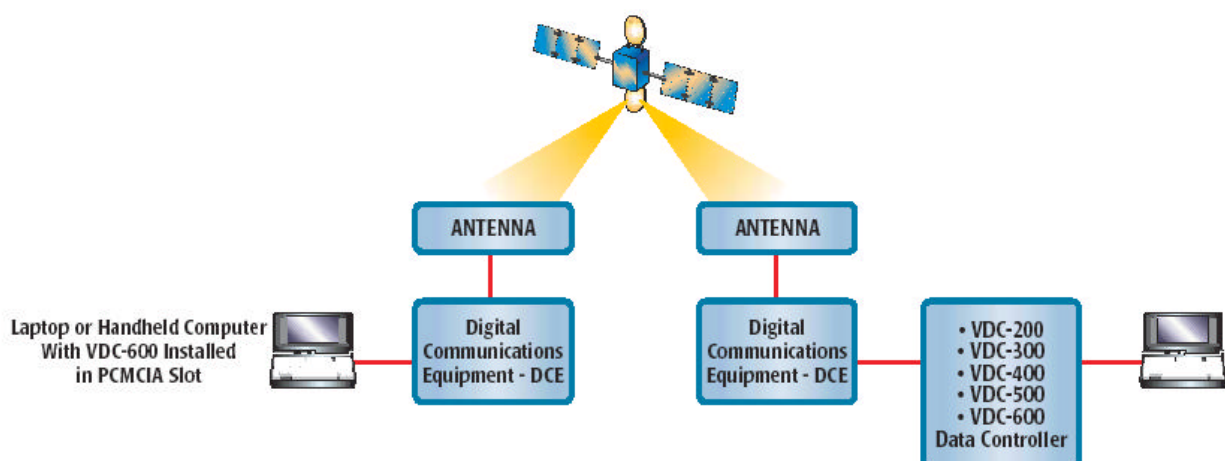
ELECTRICAL

DC Input	3.3 to 5 V (supplied by host computer)
Power Dissipation	Operational Power 150mA (typical), 200mA (max) Standby Power 130mA (typical) Auto Power-Save 30mA (typical)

ACCESSORIES & OPTIONS

Cables	Computer; KY-57/58; KG-84A/C; KY-99; AN/CSZ-1A; SINCGARS; STU-III; STE; KY-100; LST-5D/E; KIV-7; AN/PSC-5; AN/PRC-117F,-138B,-150; and others
Channel Simulator	Model VCS-232, ideal for testing VDC's when no radios are available

Diagram of mobile communication setup.



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