

Viasat Compact VDC-500 IP Data Controller

The Compact VDC-500 is a revolutionary product built on Via-Sat's VDC-500 architecture. The Compact VDC-500 performs all of the functions of the VDC-500 (ADC/IP), but in a package 2/3rds the size. The Compact VDC-500 also adds more robust power regulation, conforming to MIL-STD-1275B, for vehicular applications. Weighing a mere 2 lbs, the Compact VDC-500 is ideal for portable and space constrained applications.



The Compact VDC-500 is interoperable with all of ViaSat's existing data controllers (VDC-200, VDC-300, VDC-400, VDC-500, VDC-600). Regular VDC-200, VDC-300, VDC-400, or VDC-600 users with ViaSat eMail or VDC-400 and VDC-600 users with PDC/IP can use the Compact VDC-500 as a seamless gateway to access POP3 or FTP servers, or send SMTP email anywhere on the connected LAN. The Compact VDC-500 can also be used in pairs or with a standard VDC-500 to connect separate LANs together, providing IP connectivity over radio channels between the two LANs.

The compact VDC-500 can be used with UHF SatCom, UHF line-of-sight, VHF, HF, wireline, and other channel devices. The Compact VDC-500 uses the same MIL-STD-188-184 data communications protocol that is implemented in all VDC products. The error corrections techniques implemented in this device allow for reliable data transfers over noisy radio channels with bit error rates in excess of 15%.

Key Features

- Internet Protocol over Radio
- IP Routing
- Multicast Protocol Support
- Gateway for IDC Users
- Flexible Standard Interfaces
- Browser Management Interface
- Enhanced Error Correction
- Real Time Data Compression
- Compact Design



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Viasat Compact VDC-500 IP Data Controller Specifications



FUNCTIONAL

Operating Modes	Half-duplex, full duplex, simplex
Channel Rate	Up to 128 kbps
Channel Types	SatCom, LOS, HF, VHF, wireline
Management	Command line via telnet or TTY console emulator; HTTP browser via ethernet
Network Size	Up to 64 users per channel
Message Connectivity	Point-to-point, multicast, broadcast
Channel Access	CSMA or Instant-On
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	Ethernet RJ-45 or AUI, serial DB-9 for TTY console or SLIP
COMSEC Interface	MIL-188-114 compatible, DB15 connector 75 bps – 128,000 kbps, sync
Voice Interface	H-189/H-250 handset

ENVIRONMENTAL

Temperature	Operating temperature 0°C - 50°C Storage Temperature -30°C - 50°C
Humidity	<90% non-condensing
Altitude	40,000 ft.
Vibration	20-20,000 Hz, 0.06 g ² /Hz Aircraft, Ship, Vehicle
Shock	40G, bench, basic, crash safety

PHYSICAL

Dimensions	1.56 inches high X 5.56 inches wide X 9.00 inches deep
Weight	2.1 lbs
Volume	74 cubic in.
Mount	Optional Mounting Brackets

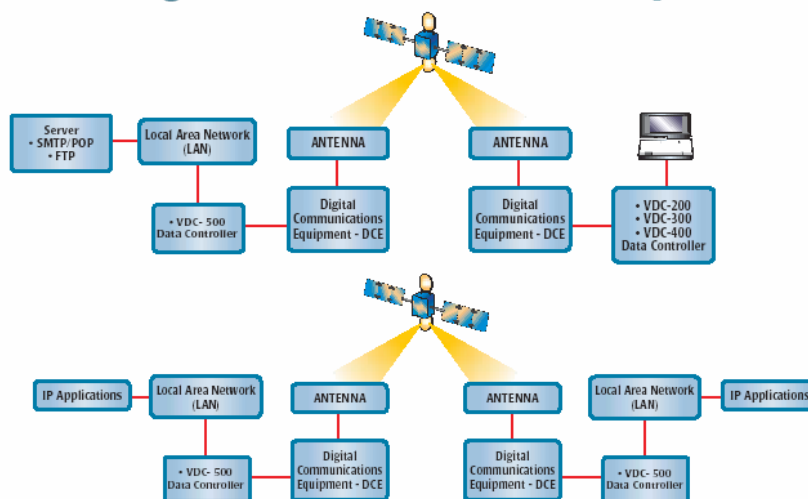
ELECTRICAL

DC Input	18 to 50 VDC
Transient Protection	MIL-STD-704; MIL-STD-1275B
Power Dissipation	6.2 watts operation, 5 watts standby

ACCESSORIES & OPTIONS

Cables	Computer; KY-57/58; KG-84A/C; KY-99; AN/CSZ-1A; SINGARS; STU-III; STE; KY-100; LST-5D/E; KIV-7; AN/PSC-5; AN/PRC-117F,-138B,-150; and others
Power Cables	Model VPS-502, wall mount power adapter, 100-240VAC, 50-60Hz, plugs for US, UK, Europe, and Australia

Diagram of mobile communication options.



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