STEATITE
COMPUTING - POWER - COMMUNICATIONS
A Solid State Group Company

VIASAT VDC-550

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

The Viasat VDC-550 delivers IP networking and the Common Operating Picture over your existing combat net radio.

The Viasat Data Controller 550 (Viasat VDC-550) enables secure data networking using any combat net radio, linking warfighters on the tactical edge to the Common Operating Picture. Run net-centric web applications, send error-free data, and employ TCP/IP services over existing radios, even over severely degraded radio channels.

Acting as an IP network interface, the Viasat VDC-550 overcomes half-duplex issues and is field-proven to handle IP connectivity on a variety of challenging radio channels including UHF SATCOM, UHF line-of-sight, VHF, HF and wireline channels. Additionally, it bundles IP packets for more efficient (less bursty) transmissions. With two Viasat VDC-550s you can route IP traffic over a radio subnet, forming a bridge over the radio link between two LANs.

This data controller also uses native MIL-STD-188-184 for fast and reliable data transfer across existing radio links. It supports networks of up to 64 users per channel with point-to-point, multicast, and broadcast messages. Using powerful error correction techniques, it sends data over poor quality channels*.

The Viasat VDC-550 can act as a gateway between TCP/IP networks and MIL-STD-188-184 networks. It works together with existing LAN-based mail and file servers to provide mail and FTP services to a network of VDC end point users who are using the Viasat eMail® application software. The Viasat VDC-550 is fully interoperable with current and legacy Viasat Data Controllers.

VIASAT VDC-550 AT-A-GLANCE

Gateway for Edge Users

- Routes IP traffic over a radio subnet
- Acts as a gateway between TCP/IP and MIL-STD-188-184 networks
- Works with existing LAN-based mail and file servers to share data with dismounted Viasat Data Controller users
- Supports MIL-STD-188-184 radio networks of up to 64 users per channel
- Fully interoperable with current and legacy Viasat Data Controllers

Optimized for Noisy Channels

- Efficient messaging and data sharing over native 184 with Viasat eMail® notes and files application
- Powerful error correction
- Automatic data compression before transmission
- Channel sharing with built-in carrier sense multiple access protocol

Combat Comms Enabled Over Radio

- Situational awareness
- Whiteboard collaboration
- Chat
- Messaging
- Email
- Cursor-on-Target Interoperable

Viasat VDC-550 IP Router Data Controller

SPECIFICATIONS

GENERAL CHARACTERISTICS

Operating Modes	Half-duplex, full-duplex, simplex
Channel Rate	Up to 128 kbps (Call for details)
Channel Types	SATCOM, LOS, HF, VHF, wireline and others
Managemen	Command line via telnet or TTY console emulator and GUI

INTERFACES

Data Interface	Ethernet RJ-45 or DB-15 AUI; Serial DB9; USB 2.0
DCE Interface	MIL-STD-188-114A or RS-232 compatible, DB-15 connector, 75 to 128,000 bps synchronous

POWER

DC Input Voltage	18 to 38 V, DB9 connector
Transient Protection	MIL-STD-704, MIL-STD-1275B
Consumption	7.5 W operation

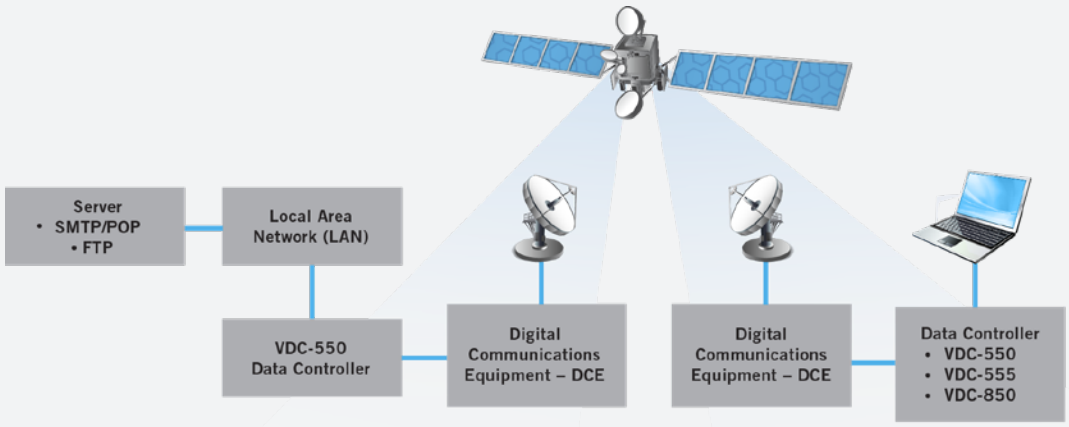
ENVIRONMENTAL

Operation Temperature	-0° to 50° C
Storage Temperature	-30° to 50° C
Humidity	<90% non-condensing
Altitude	40,000 ft
Vibration	20 Hz to 2 kHz, 0.06 g^2/Hz Aircraft, Shipboard, Vehicular
Shock	40 G, bench, basic, crash safety

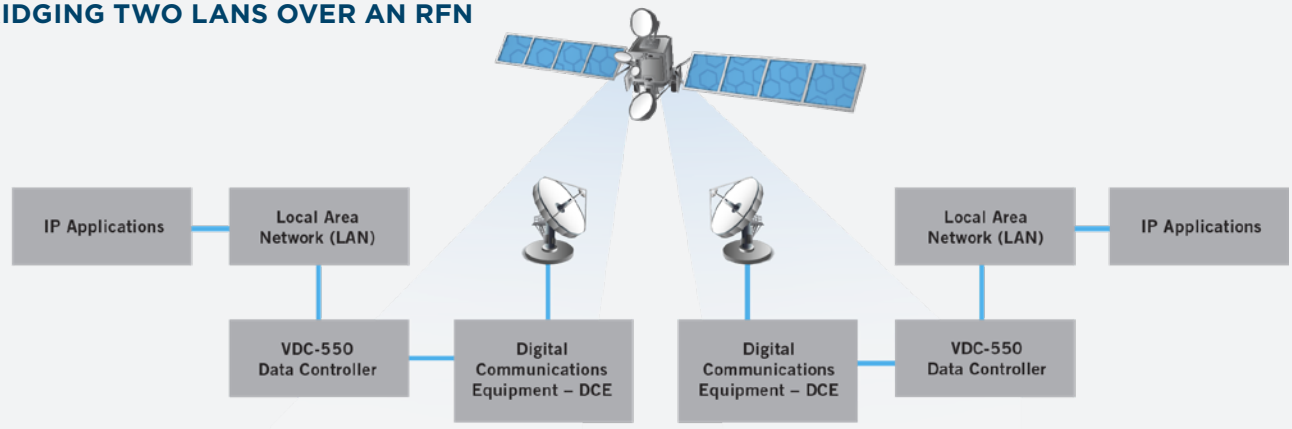
PHYSICAL CHARACTERISTICS

Dimensions (W x H x D)	5.73 x 3 x 8.5 in.; 146 x 77 x 216 mm (including front panel knob and rear connectors)
Weight	3.25 lb
Volume	109 $in.^3$
Mount	Standard avionics DZUS rail

COMMUNICATIONS FROM A VIASAT DATA CONTROLLER NETWORK TO A LAN



BRIDGING TWO LANS OVER AN RFN



STEATITE LIMITED
RAVENSBANK BUSINESS PARK
ACANTHUS ROAD
REDDITCH
WORCESTERSHIRE
B98 9EX

WWW.STEATITE-COMMUNICATIONS.CO.UK
A DIVISION OF STEATITE

Telephone: **+44 (0)1527 512400**
Email: **communications@steatite.co.uk**