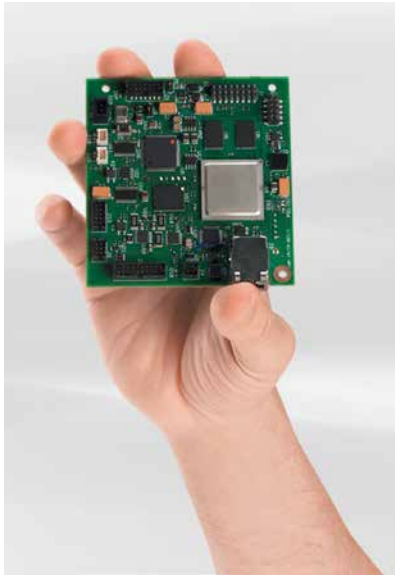


## VDC-555

Embeddable Data Controller  
**Data Controllers**



**The embeddable Viasat VDC-555 delivers IP networking and the Common Operating Picture over your existing combat net radio**



With the embeddable Viasat Data Controller 555 (VDC555) your combat net radio can link warfighters on the tactical edge to the Common Operating Picture with secure data networking. Run net-centric web applications, send error-free data, and employ TCP/IP services, even over severely degraded radio channels.

Acting as an IP network interface, the Viasat VDC-555 can be easily embedded into existing combat net radios or radio support equipment to overcome half-duplex issues, providing 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.

This embeddable data controller 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, the Viasat VDC-555 sends data over poor quality channels\*.

With the Viasat VDC-555, your radio 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-555 is fully interoperable with current and legacy Viasat Data Controllers.

### Embeddable VDC-555 At-A-Glance

#### Turnkey Embeddment

- Easy-to-access pins; power, EIA-232, and USB console inputs
- Synchronous and asynchronous DCE interface support
- Compatible with PC/104 stack

#### 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

#### Optimised 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

## General Specifications

<b>Operating Modes</b>	Half-duplex Full-duplex Simplex
<b>Channel Rate</b>	Up to 128 kbps
<b>Channel Types</b>	SATCOM LOS HF VHF wireline others
<b>Management</b>	Command line via telnet or TTY console emulator and GUI

## Power

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

## Interfaces

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

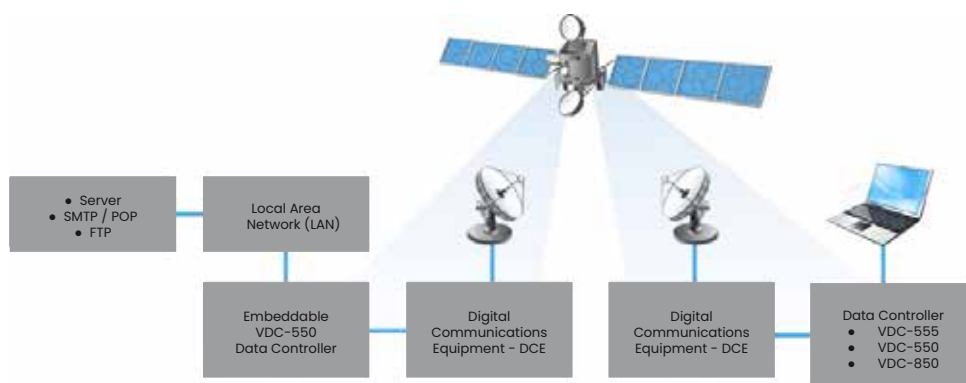
## Environmental Specifications

<b>Operational Temperature</b>	- 40°C to + 70°C
<b>Storage Temperature</b>	- 40°C to + 70°C
<b>Humidity</b>	< 90% non-condensing
<b>Altitude</b>	40,000 ft
<b>Vibration</b>	20 Hz - 2 kHz, 0.06 g <sup>2</sup> /Hz Aircraft, Shipboard, Vehicular
<b>Shock</b>	40 G, bench, basic, crash safety

## Physical Characteristics

<b>Dimensions</b>	7.62 x 7.62 cm; PC/104 stack compatible
-------------------	---

### Communications from a Viasat Data Controller Network to a LAN



### Bridging two LANs over an RFN



September 2018

All specifications are subject to change without notice  
The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier



sales@eylex.com.au  
www.eylex.com.au

