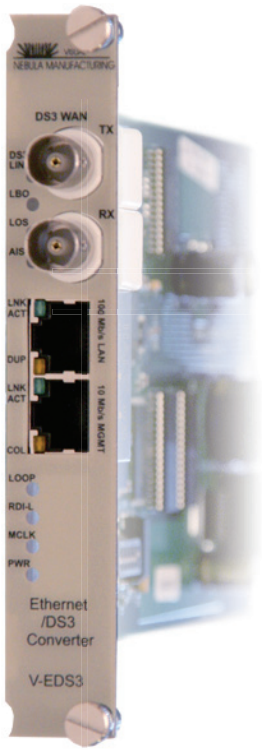
VFAST™ Ethernet Interconnect

VFAST DS3 Ethernet Converter



Nebula's VFAST Ethernet Interconnect family of products allows service providers to take advantage of available DS3 or OC3 facilities to extend Ethernet services to off-net customers and to cost-effectively open new markets. By installing Nebula's VFAST DS3 Ethernet Converter in the carrier's collocation office and customer premise, service providers can use cost-effective leased DS3 circuits to extend high-bandwidth Ethernet services, such as IP VLANS and LAN interconnect, to customers located off-net or in remote locations.

In addition, by deploying VFAST Interconnect with DS3 circuits, service providers can enter a new market with low upfront investment, avoiding the risk and delayed profitably of deploying a full optical solution in a new market. With Nebula's VFAST Interconnect system, service providers can expand services and markets profitably, one customer at a time.

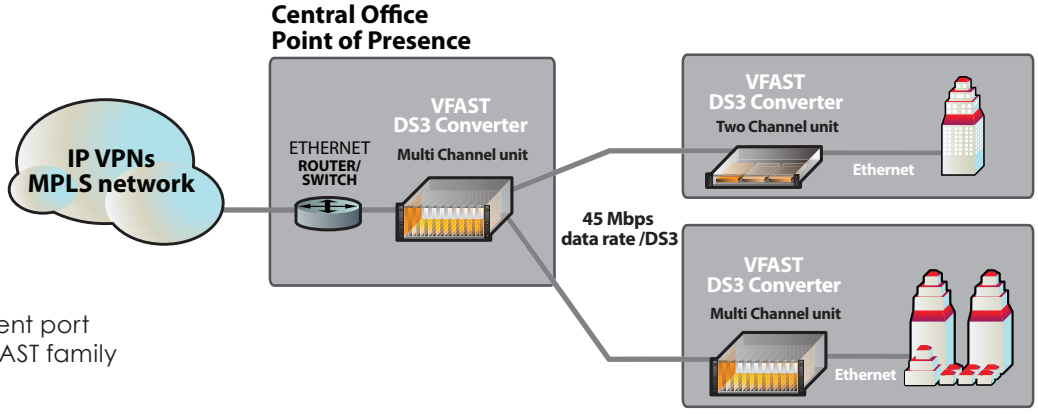
The VFAST DS3 Ethernet Converter delivers 100 Mbps Ethernet over DS3, providing 45 Mbps data rates over DS3 facilities. The VFAST DS3 Ethernet Converter uses Nebula's proven EtherOptic platform and offers:

- Highly reliable communication links,
- Integrated management using a dedicated management port for SNMP configuration and status monitoring,
- Two levels of prioritization and low latency, to provide the Quality of Service (QoS) necessary to support voice and video, applications.
- Plug-and-play architecture for non-intrusive deployment, and
- Incremental provisioning for profitable growth.

The VFAST Ethernet Interconnect products also include the VFAST OC3 Ethernet Converter, which converts Ethernet to OC3, providing up to 100 Mbps data rates over OC3 facilities.

VFAST DS3 Converter Highlights

- 45 Mbps / DS3
- Carrier grade
- 2 levels of QoS support Voice and Video services
- Dedicated management port
- Shares cabinet with VFAST family



VFAST DS3 Interconnect Technical Specifications

	DS3 Ethernet Converter	
Effective Data Rate	45 Mbps	
Data Traffic Management	Two level 64Kb buffer	
Latency	120 µsec	
Connections	• 2 DS3 co-ax connectors (BNC-75 ohm) Tx and Rx • 2 RJ45 twisted pair ports 2nd port for IP configuration and monitoring	
Indicators	DS3 Link	Link condition Line build out Loss of signal Alarm indication
	LAN Interface	Link/Activity Duplex
	Mgmt Interface	Link/Activity Collision
	DS3 Facility	Loop back Far end receive Master clock Power
Option Settings	• Network (TFTP) server • Factory settings reset • Autonegotiate on	• Static/Dynamic IP • Line build out (<225' or <450') • Internal/External clock
IP Features	• SNMP management • Time sensitive traffic handling (VOIP) • Traffic shaping and packet identification (VLAN) support • Jumbo frame handling	
Signaling	Framing C-Bit parity Line Code B3ZS Line Rate DS3 (44.736 Mbps) Line build out Up to 450 feet	
Power	Power source 12 V or - 48V (redundant) DC Power consumption 3.5 W	
Environmental	Operating temperature -40 to 150° F (-40 to 65° C) Humidity (relative) 10–90% non-condensing	
Dimensions	1 slot (0.8 inches) wide, 3U (5 1/4 inches) high, 7.3 inches deep	
Applicable Standards	ANSI T1.102, T1.107, T1.404 ITU-T G.775, G.824 IEEE 802.3, 802.3u, 802.3x Telcordia GR-253-CORE, GR-499-CORE Bellcore TR-TSY-00009, TR-62415	

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