

NetVanta 818



Product Features

- 8-port EFM (g.Bond) bonded DS1 or E1
- Up to 12 Mbps (over DS1) or 16 Mbps (over E1s) of resilient Carrier Ethernet service
- Certified MEF9, 14 Traffic Management Compliant
- 1 RMU stackable with wall-mount or rackmount options
- Rapid deployment via EZ-Ethernet Provisioning
- Standards-based OAM supported
- Monitoring, fault detection, and loopback functions
- Flexible bandwidth management
- Performance monitoring with threshold alarms
- Configurable queuing for CoS support
- Command Line Interface (CLI)
- Traffic storm protection to prevent service interruptions due to broadcast, multicast, unicast or L2CP traffic
- Small Form-factor Pluggable (SFP) 1000Base-X Ethernet
- Autosensing 10/100 Base-T Ethernet connections
- Industry-leading warranty

Eight-Port, DS1/E1 EFM Ethernet NTU

Ethernet is the undisputed global choice for **Metro Access Networks (MANs) and Local Access Networks (LANs)**. However, existing copper access networks do not facilitate an end-to-end high-bandwidth connection, creating a bottleneck. This bottleneck is the first mile of access. This refers to the access link (most often a TDM-based copper circuit) from the business customer's office LAN to their service provider's MAN. ADTRAN offers service providers the ability to remove this bottleneck through the utilisation of an improved data transmission standard. This standard, ITU-T G.998.2, is known as Ethernet in the First Mile (EFM). ADTRAN EFM over Copper (EoCu) and TDM (EoTDM) defines a way to effectively and universally bond together, lower bandwidth copper loops or pairs of wires creating a Carrier Ethernet access connection.

This innovative EoCu/EoTDM solution enables service providers to extend packet-based business-class services beyond the reach of their fibre network by leveraging the existing investment of copper-based TDM business services assets. This means leveraging the full advantages of TDM, the most understood, successful, and ubiquitous business service infrastructure. Due to budget restrictions and time to market requirements, deploying fibre to address uneven or disperse service demand is not feasible, leaving a large percentage of businesses to rely on copper business access.

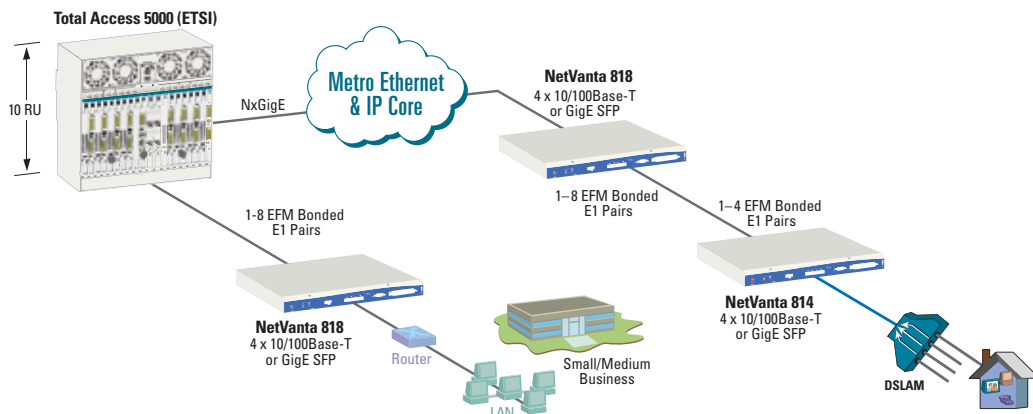
Quality of Service Flexibility and Assurance

The NetVanta 800 Series delivers packet flow capabilities that are certified compliant per the Metro Ethernet Forum. These packet flow capabilities offer the traffic classification and bandwidth profiling capabilities required to offer customers a flexible, tiered service offer. In addition to this highly configurable, granular bandwidth selection toolset which provides Quality of Service (QoS) options, these same network termination points support the standards-based measurement and monitoring capabilities required to maintain a carrier-grade Ethernet network. All of this allows providers to create and meet customer SLA agreements.

Simplified Service Delivery

In order to improve service time to market and reduce deployment costs, the NetVanta 800 Series delivers a feature set designed to simplify service deployment and maintenance. ADTRAN Advanced Operational Environment (AOE) employs EZ-Ethernet Provisioning, minimising the number of steps to provision a new service. The EIA-232 craft port enables local access for configuration and status information. A management VLAN is used to remotely configure and collect status information.

8-port EFM over DS1 or E1



Smart Solutions for a
Connected World.



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ADTRAN is an ISO 9001, ISO 14001,
and a TL 9000 certified supplier.

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Eight-Port, DS1/E1 EFM Ethernet NTU

Physical Interface

Network Interface

- DS1/E1 - RJ-21

Client Interface

- Four Autosensing 10/100Base-T Ethernet
 - RJ-45
 - Auto MDI/MDIX
 - Auto-Rate
 - Auto-Duplex
- Gigabit Ethernet interface via SFP cages
- All Ethernet ports may be used for either network WAN or customer-side LAN connections

Gigabit Ethernet Interface

- Connector: Single SFP
- Interface Type: 1000 Base-X
- Compliance: 802.3, 802.1D, 802.1Q

Management: Console Port

- DB-9
- EIA-232

Diagnostics LEDs

- Power/Alarm LED
- Ethernet LED
- SHDSL Loop Status for Each Loop

Environment

- Operating Temperature: -40 C to +65C (-40 to +149F)
- Storage Temperature: -40C to +85 C -40 to +185F()
- Relative Humidity: Up to 95%, Non-condensing

Physical Specifications

- Dimensions: 44 mm x 437 mm x 254 mm (H x W x D)
(1.75 in. x 17.2 in. x 10 in.)
- Weight: 3.6 kg (8 lbs)
- DC Power: -48 VDC or +/-24 VDC (A or B power feed)
- Power Dissipation: 17.5 watts maximum

Ethernet Features

- IEEE 802.1p priority marking
- IEEE 802.1d dynamic/transparent bridging
- IEEE 802.1Q VLAN tagging
- IEEE 802.3u Ethernet
- MEF 9/14 certified EPL, EVPL, ELAN

Ethernet Services Support

- Priority queuing of traffic based on VLAN priority
 - Supports eight class of service queues
 - Per UNI port, CE VLAN ID (C-Tag) and/or CE VLAN P-bits, DSCP fields
- Single stack VLAN and double stack VLANs (Q-in-Q)
 - Manipulation based on 802.1p and DSCP fields
 - STAG TPID provisioning supports 802.1ad and 802.1Q standards
 - Port-based service support

Services Scale and Flexibility

- MEF 9, 14 compliant EPL, EVPL, ELAN
- Configurable EtherType and TPID for service flexibility
- VLAN IDs 0–4095; EVC configurable in the range of 2–4094
- Configurable MTU Mini Jumbo frame support (1700 Bytes)
- 16k active MAC address; Ability to disable MAC learning (32k support future software)
- Ingress policers (tr3CM), CIR and EIR settings to 64 kbps granularity, Configurable Burst through EBS, CBS settings
- Egress shaping per port (per port per queue and per up to 16 VLAN groups in future)

Resources

- 64 EVCs
- 64 EVC Maps
- 64 Policers
- 4 EFM Group

Fault and Performance Management

- IEEE 802.3ah EFM standard
- ITU-T Y.1731 CFM, PM
- Supports OAM management status and loopback messaging
- Supports Terminal and Facility MAC-Swap Loopback

Management and Administration

- Management Methods
- Craft interface (Local, EIA-232)
- SNMP proxy via Total Access 5000
- Firmware upgrades
- Local: YMODEM through craft port
- Remote: Managed through Total Access 5000
- Configuration script download

Regulatory Agency Approvals

- FCC Part 15 Class A
- FCC Part 68
- UL 60950, CAN/CSA C22.2 No. 60950
- EN 60950, IEC 60950, AS 3260/ AS NZS60950
- NEBS Level 3
- S043.2
- ITU-T K21:2000 Basic

Ordering Information

Equipment	Part #
NetVanta 818	1200637G2
48VDC Power Supply, EU Cord	1202470E2
48VDC Power Supply, UK Cord	1202470G3
48VDC Power Supply, AUS Cord	1202470L4

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