OnSite™ EFM IAD
3300 Series

Pair bonding support of up to 4 twisted-pairs (8-wire), multiple bandwidth options, and strong software suite makes the Patton OS3300 the ideal integrated access device (IAD) for service providers looking to replace E1/T1 service with high speed Metro Ethernet E-Line, E-LAN, or E-Tree services over copper.

Bandwidth Rich
Bond up to 4 twisted pairs to achieve the desired rate and reach:

1 Pair	**5.7 Mbps**	*2 Pair*	**11.4 Mbps**
3 Pair	**17.1 Mbps**	*4 Pair*	**22.8 Mbps**

Operates Over Twisted Pair or Cat5+
Near fiber speeds without the cost of new cable or fiber installations or the hassles of wireless line-of-sight.

Connects Point-to-Point or to-DSLAM
The OS3304 can be used back-to-back or with any G.BIS compliant third party or Patton DSLAM.

Stateful Firewall Inspection
Stateful firewall inspection is accomplished through ACLs that filter by source and destination IP address, IP port and protocol.

VLAN Tagging
VLAN tagging and processing is configurable on Ethernet port.

Patton's Model 3300 is a cost effective G.SHDSL.bis Ethernet in the first mile (EFM) IAD capable of achieving over 22 Mbps symmetrical line rates. OnSite 3300s are the ideal choice for providing Internet access to bandwidth hungry small to medium-size offices, wireless backhaul, Metro Ethernet, even LAN-to-LAN extensions.
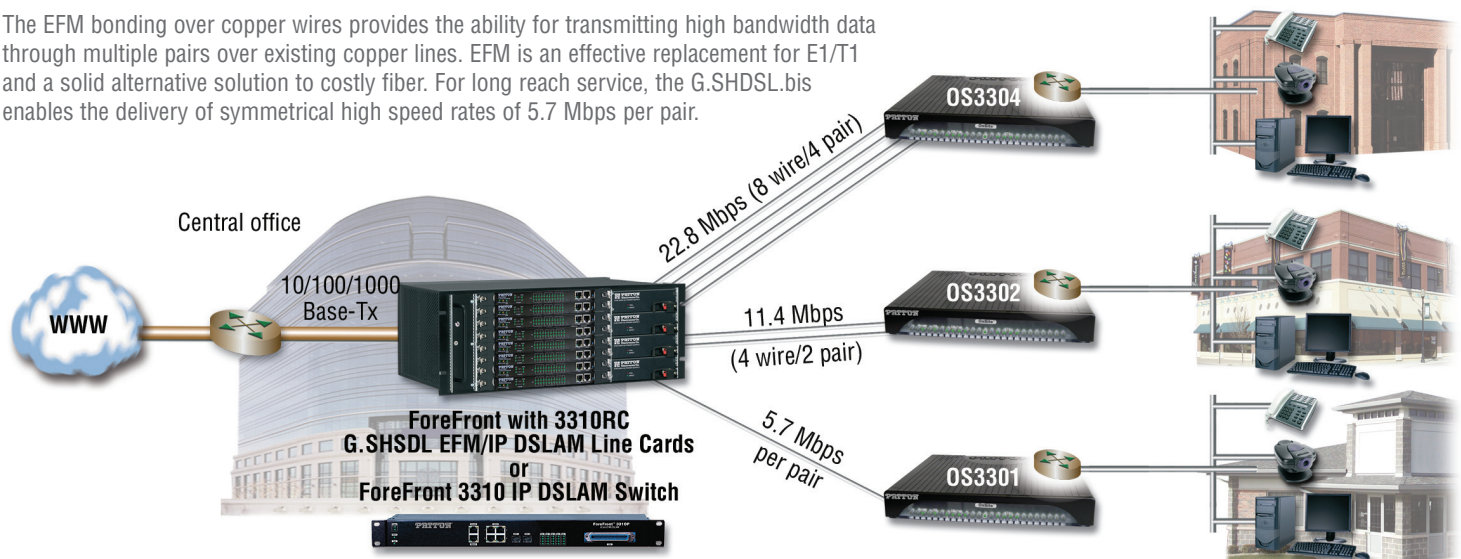
The OS3300 can bond 1 to 4 pairs to increase overall bandwidth (each pair capable of up to 5.7 Mbps). Configuring both pair bondings enables service providers and business to choose the best available rate vs. reach options available. The OS3300 can be set to auto rate mode, which will allow the OS3300 to automatically select the best rate achievable (based on a per-wire basis) or manual fixed line rate mode. The OS3300 supports different rates on the pairs of a bundle. The traffic remains in case of line-faults, as long as at least one pair of a bundle is operating.

QoS configurations ease the bandwidth management of ports and applications through the creation of QoS classes and profiles. Traffic can be shaped and policed to provide full QoS control over egress and ingress directions.

The OS3300 offers easy installation, CLI configuration via Console/VT-100 or Telnet/SSH, and HTTP web based management, and SNMP.

Visit www.patton.com to view our huge selection of network connectivity products and more.

The EFM bonding over copper wires provides the ability for transmitting high bandwidth data through multiple pairs over existing copper lines. EFM is an effective replacement for E1/T1 and a solid alternative solution to costly fiber. For long reach service, the G.SHDSL.bis enables the delivery of symmetrical high speed rates of 5.7 Mbps per pair.

Central office

10/100/1000 Base-Tx

WWW

ForeFront with 3310RC
G.SHSDL EFM/IP DSLAM Line Cards
or
ForeFront 3310 IP DSLAM Switch

OS3304 — 22.8 Mbps (8 wire/4 pair)

OS3302 — 11.4 Mbps (4 wire/2 pair)

OS3301 — 5.7 Mbps per pair

PATTON®
let's Connect!™

Specifications*

G.SHDSL (ATM/EFM)
- Support ITU-T G991.2/G.994.1 standards
- Support ITU-T G.998.1 (G.bond)
- TC-PAM line modulation 16,32,64 & 128
- CO or CPE Mode
- IEEE 802.3 2Base-TL (aka 802.3ah) compliant
- Rate negotiating/manually rate adaptation configuration
- 2–8 wire mode auto detect
- Data rate selections: Up to Nx239 (5.7 Mbps) per pair
- Support bonding based on EFM
- Line interface: up to 4 pairs on a single RJ45 connector

Physical Feature
- 4 port Fast Ethernet Base-T 10/100 (routable & switchable)
- 1 RJ45 G.SHDSL port for EFM transmission (1, 2 or 4 pair)
- 1 RJ45 RS-232 Console port
- 1 USB 2.0 port (optional)

IP Addressing & Routing
- NAT/NAPT
- DHCPClient/Server/Relay
- DNS Relay/Server/Client
- SNTP Client IPv4/IPv6

- Full Policy Based Routing (PBR) Support
- PPPoE

Security
- Stateful Firewall
- Extended ACLs
- Radius Authentication
- SSH/TLS

Switching and Quality of Service
- IEEE 802.1D
- 802.1Q/802.1P
- Link Scheduling

VoIP Features (Licensed)
- Call capacity -4 SIP Sessions, license upgradeable up to 250 calls
- SIPv2/SIPv2 over TLS
- Inbound and outbound SIP Registration
- B2BUA Abilities
- SIP Protocol Normalization
- SIP Header Manipulation
- Call-Routing (source, destination, time, date, ...)
- Multiple SIP Trunk support
- Call Hunt- and Ring groups
- Voice priority
- UpStreamQoS™
- Transparent to the RTP payload and all codecs

- No transcoding (use SmartNode 5480 for transcoding)

Management Features
- SNMP v1, v2, v3
- Telnet/SSH/RS-232
- HTTP/HTTPS/ Provisioning
- SYSLOG
- TACACS +
- TFTP, HTTP & HTTPS file management

Temperature
32 to 122 °F (0 to 50°C)

Humidity
5 to 95%, non-condensing

Physical and Power
- 7.3 x 6.6 x 1.62 inch (185 x 168 x 41 mm)
- 0.4 lbs (181g)
- External PSU AC: 100 to 240 VAC

MTBF
- Without PoE: 32,852 hours
- With PoE: 28,293 hours (MIL-HDBK-217F; 50C)

Compliance
- FCC Part 15A
- CE Mark

Ordering Info

Obtain ordering info for this product by using the QR code at right or by contacting:
- web: **http://www.patton.com/products/product_detail.asp?id=494&tab=Ordering**
- email: **sales@patton.com**
- tel: **+1 301.975.1000**

* Specifications subject to change without notice.