



ForeFront™ 3310RC

EFM Premium Services Blade

Patton's ForeFront™ 3310RC EFM provides 24 G.SHDSL.bis ports of symmetric broadband, premium access channels, each up to 5.7 Mbps. EFM bonding for bandwidth aggregation to 22.8 Mbps.

Built-in Business-Class Support

G.SHDSL.bis high-bandwidth (5.7 Mbps per pair, TC-PAM 32). Multicast support and QoS traffic management.

QoS

Traffic classification with shaping and policing; 802.1p VLAN priority; ToS/DiffServ stripping and priority queuing.

24 G.SHDSL.bis Ports

Allows for right size deployment with the best port per card ratio. Easily scale by adding cards.

Per-Port Configuration

To facilitate the provisioning and tailoring of services, ports are independently selectable to the required port speeds.

Management Features

Configurable alarm reporting with SNMP traps, CLI over TELNET, SSH, or Console.

Patton's EFM ForeFront™ chassis blade, 3310RC, offers high-speed, reliable configurable Ethernet in the First Mile (EFM) access links with 24 copper-pair ports.

Each G.bis copper pair supports 192 kbps to 5.7 Mbps. Create high bandwidth access channels by EFM bonding (2BASE-TL) up to 4 ports (IEEE 802.3ah) yielding 22.8 Mbps. The 3310RC EFM blade integrates an HTTP server for management access via any standard browser. Without a single point of failure in a chassis installation, all cards remain accessible though another card is removed. Dual GigEthernet uplink ports and the packet-switched mid-plane bus (for Ethernet traffic) ensures traffic delivery, and robust performance in various failure modes.

The FF3310RC EFM blade can be installed in any Patton 2U, 4U, or 6U ForeFront Access

System chassis, including ForeFront systems already deployed with legacy services. The ForeFront solution offers a migration path from legacy services to premium Carrier Ethernet services in the same chassis.

All ForeFront chassis support N+1 redundant power with integrated cooling and hot swappable blades for easy maintenance without disruption to actively deployed services.

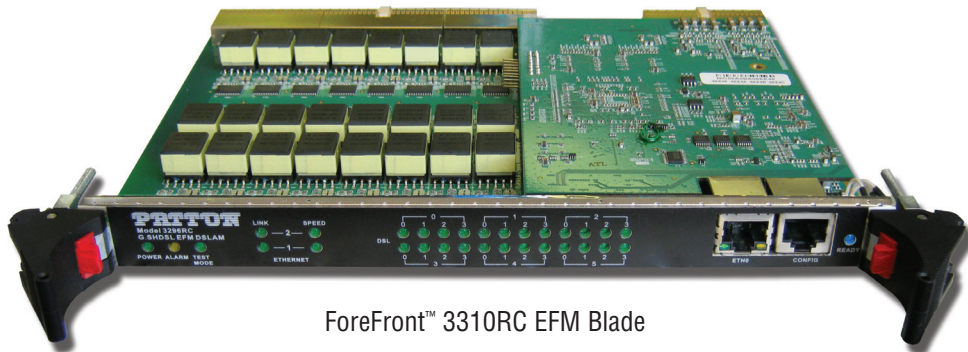
Providers leverage the EFM blade's capabilities to delivery premium symmetric services for IP-based voice, video, and data services with QoS flow management. Also supported are 802.1p/Q VLAN priority classes, and VLAN-stacking ("Q-in-Q") to ensure transparent extension of VLAN multiplexed services.

Visit www.patton.com to view our broad selection of network extension products.

Model 3088A/I EFM CPE Bridge
2 wire



Model 3202 EFM Managed Switch
2/4/8 wire

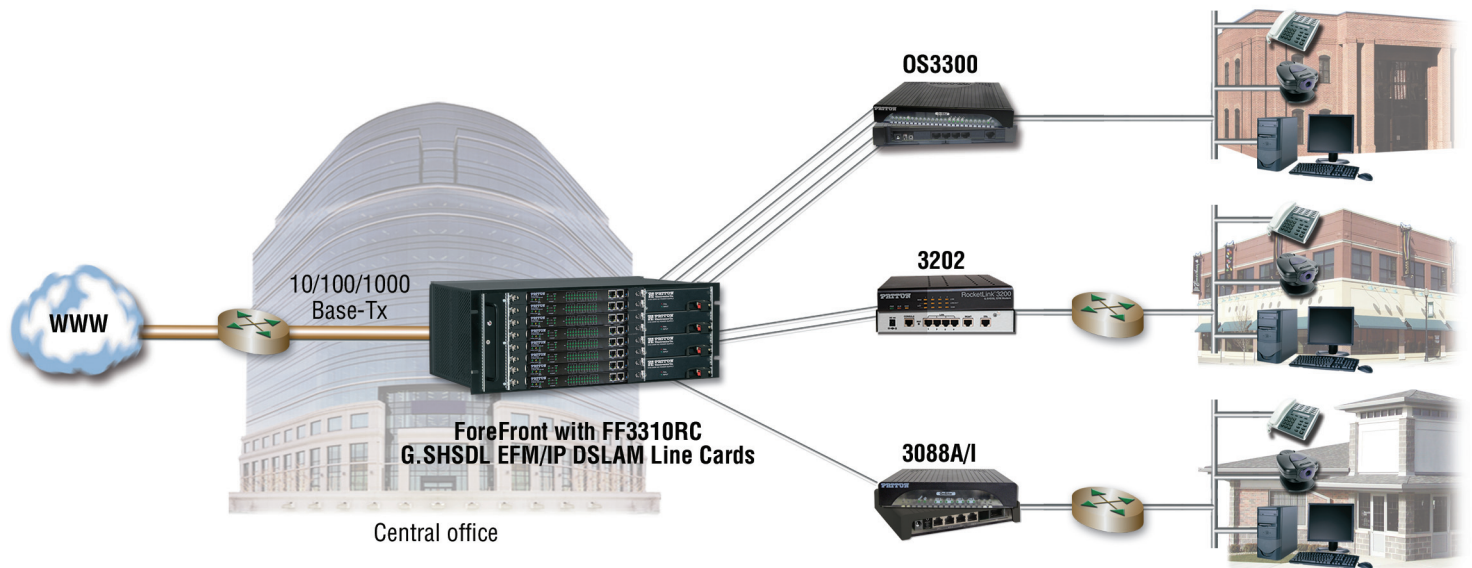


ForeFront™ 3310RC EFM Blade

Multi-Port Security Ethernet Extension Application

The Extreme FullPipe™—configured with ForeFront™ 3310RC cards—provides 312 G.SHDSL.bis links in a 6U chassis. Whether delivering LAN

extension services or Internet access, the ForeFront™ 3310RC is interoperable with Patton CPE as well as with third-party solutions.



Specifications

G.SHDSL Port

24 ports configurable per ITU-T • 991.2 bis including Annex A, B, F & G (per port)

Bonding (5.7 Mbps per wire pair)

2 wire – 5.7Mbps
4 wire – 11.4Mbps
8 wire – 22.8Mbps

Modulation

TC-PAM 16/32

Ethernet Ports

Two 10/100/1000 backplane-facing, auto-negotiating ports • Two

10/100/1000 auto-negotiating rear card ports with SFP interface for easy media selection • Single 10/100/1000 auto-negotiating, full/half duplex front card • 802.1ad Link Aggregation and LACP

EFM Support

IEEE802.3ah OAM • Multi-pair bonding up to 4 pairs (2BASE-TL)

VLAN & Bridging Support

IEEE 802.1Q including per interface tagging • IEEE 802.1p priority queuing and re-striping • VLAN stacking or "Q-in-Q" • Support up to 512 VLANs • VLAN tag insertion and stripping selectable on per-

port basis • Spanning Tree (802.1D) • RSTP (802.1w) • MSTP (802.1s/Q) • MAC address filtering (8 per VLAN) • QoS • TOS/Diffserv

Network Functions

DHCP Client • DNS Client/Server/Relay • ARP

Management Service

CLI SNMP, Telnet Ethernet, RS-232 Console or Craft Port, SYSLOG Client, Software upgrade via TFTP • SNMPv1, SNMPv2c, MIB II, NTP Client, TACACS+ Login

Alarm Reporting

Configurable alarms • Remote SNMP traps • Front panel LEDs

Compliance

UL-1950 • CSA per 22.2-No. 950 • FCC Part 15 Class A • CE Mark • EN55022 • EN61000 • EMC Directive 2004/108/EC • LV Directive 2006/95/EC • RoHS Directive 2011/65/EU

Operating Temperature

0 to 50°C (32 to 122 °F)

Relative Humidity

5 to 90% non-condensing

PATTON
Let's Connect!

07MFF3310RC-DS2

Patton is a registered trademark, and is a trademark of Patton Electronics Company in the United States and other countries.

Patton Electronics Co.
7622 Rickenbacker Drive
Gaithersburg, Maryland
20879
USA
Phone +1 301 975 1000
Fax +1 301 869 9293
E-mail sales@patton.com
Web www.patton.com

PE-Inalp Networks Private Ltd
Old No. 14 and New No.6,
Brahadambal Road,
Nungambakkam High Road
Chennai: 600 034, India
Phone +91 44 45490395/6/7
Fax +91 44 4549.0394
Email sales@patton.co.in
Web www.patton.co.in

Patton-Inalp Networks AG
Meriedweg 7
CH-3172 Niederwangen
Switzerland
Phone +41 (31) 985 25 25
Fax +41 (31) 985 25 26
E-mail sales@inalp.com
Web www.inalp.com