

# RocketLink™ Model 3200 Series

## 2Base-TL Ethernet First Mile G.SHDSL Modem

Patton's Model 3200 offers the reliability, reach, and rates essential for today's high speed, broadband Ethernet first-mile services and remote office connectivity.

### G.SHDSL speeds to 22.8 Mbps

Get reliable broadband connectivity with TC-PAM full-duplex symmetric rates and distances exceeding 24,000 feet (7,300 meters)

### EFM

Pure Ethernet solution provides seamless integration into today's and future networks.

### QoS, CoS, and VLAN Support

Make the most out of your service offerings or ensure top quality network connections with advanced traffic management features.

### Interoperable with DSLAMs or Point-to-Point

Take advantage of Patton reliability whether you connect back to back or to third-party DSLAMs

### 4 x 10/100 Ethernet Switch

Make up to 4 network connections easily. Built in MDI-X auto cross over switches eliminates messy and confusing cable configurations.

### WWW/SNMP Manageable

Built-in VT-100 console port makes setup a snap, and you can use the embedded HTTP/SNMP agent to manage the Model 3200 from anywhere in the world.

The Patton RocketLink™ Model 3200 simplifies and provides cost effective network extension by utilizing pre-existing twisted pair infrastructure enables service providers to offer broadband or data backhaul services to businesses, governments, and various institutions over existing last-mile, copper infrastructure. Today, more than ever, operators are finding the business case for leveraging their existing copper networks to be highly attractive from an ROI and initial investment perspective over fiber roll-outs.

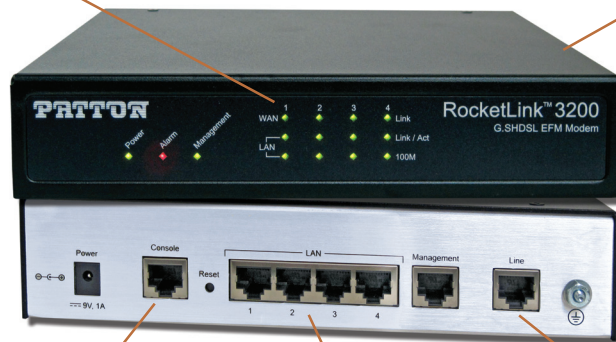
The Model 3200 is Ethernet First Mile (EFM) compliant. EFM—also called pure Ethernet—lowers OPEX and CAPEX by resolving one of the biggest deficiencies in carrier networks, the lack of interworking arrangements among different protocols such as Frame Relay, TDM, ATM, and of course DSL. Using EFM allows for more efficient and trouble-free networking environments. Service providers can concentrate on providing differentiated services instead of concentrating on resolving their latest issue of protocol conversions.

Patton's 3200 G.SHDSL.bis modem incorporates next-generation SHDSL technology with multi-pair bonding to offer unmatched rate, reach and reliable Ethernet connectivity, providing symmetrical 22.8 Mbps of bandwidth over 4-pair (8-wire) at distances up to 1.8 miles (2.9 km). The RocketLink 3200 comes standard with a 4-port fast Ethernet switch with full QoS and CoS features. VLAN (802.1q) capabilities include 4 levels of priorities, traffic flow control, and rate control. These traffic management and QoS features enable service providers to provision for differentiated services and/or SLAs.

The RocketLink 3200 is a complete, managed, end-to-end system when used either back-to-back or with a 3rd party ipDSLAM. The 3200 is the clear and easy choice for mission-critical networking.

15 front panel LEDs show operational Status at a glance

Proven Patton reliability



Configure with Console, Web, Telnet, or DIP-switches

4-port Fast Ethernet Switch

2Base-TL (EFM) RJ-45 Line Port

## Typical Deployment

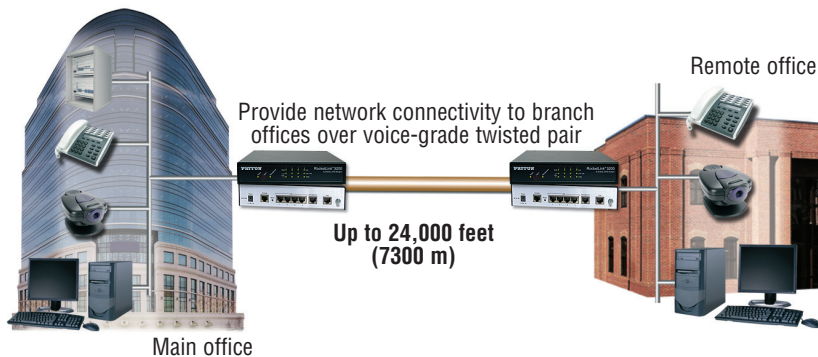
The Model 3200 G.SHDSL EFM modems are ideal for delivering remote network access for inter-office connectivity. Businesses can take advantage of the already installed copper infrastructure and pass up to 22.8 Mbps of symmetrical data reliably at distances of up to 1.8 miles (2.9 km).

Utilize pre-existing copper infrastructure for mobile backhaul to reduce Last Mile transport costs and to connect to new packet-switched networks.

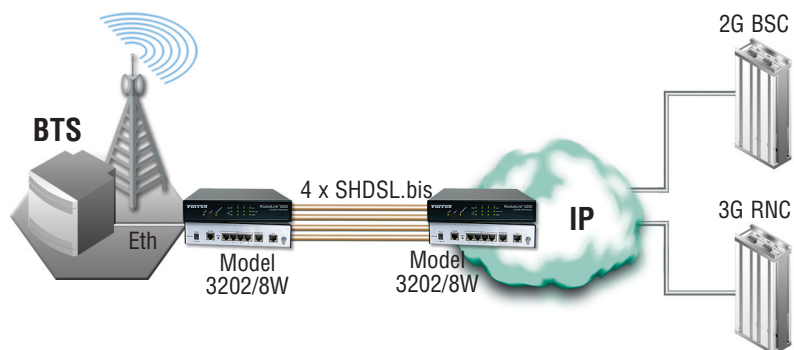
3200 Series Distance Chart (Per Wire Pair)

DSL Line Rate	26 AWG/0.4mm		24 AWG/0.5mm		22 AWG/0.65mm		
	N	kbps	kft	km	kft	km	kft
3	192	21.5	6.6	27.2	8.3	34.8	10.6
4	256	19.5	5.9	24.7	7.5	31.5	9.6
8	512	17.5	5.3	22.1	6.7	28.3	8.6
12	768	16.5	5	20.9	6.4	26.7	8.1
16	1024	16	4.9	20.2	6.2	25.9	7.9
20	1280	15	4.6	19	5.8	24.3	7.4
24	1536	14.5	4.4	18.3	5.6	23.5	7.2
32	2048	13.5	4.1	17.1	5.2	21.8	6.6
36	2304	13	4	16.4	5	21	6.4
60	3840	10	3	12.6	3.8	16.2	4.9
72	4608	9.5	2.9	12	3.7	15.4	4.7
89	5696	8.5	2.6	10.8	3.3	13.8	4.2

## Remote Office Connectivity



## Wireless Backhaul



## Specifications\*

### G.SHDSL Connector

Shielded RJ-45

### G.SHDSL Specifications

ITU-T G.991.2.(2004); 2Base-TL; EFM Bonding (IEEE 802.3ah PAF)

### DSL Modulation

TC-PAM 32; 16

### Ethernet Connector

4 x 8-position shielded RJ-45. Auto-sensing 10/100Base-TX with half or full-duplex operation.

### LAN Protocols

802.1d Transparent Bridging, 2K MAC address learning bridge

### VLAN Support

IEEE 802.1q VLAN Tagging; Port Based VLAN, up to 4K VLANs; VLAN Stacking (Q-in-Q)

### QoS Support

Rate limiting rule-based/port-based; Traffic classification based on port/802.1p/DSCP (Differentiated Services Code Point); WRR (Weighted Round Robin)/SPQ (Strict Priority Queuing) scheduling algorithm

### Management Connector

WEB: Shielded RJ-45; Console: Shielded RJ-45

### Management Interface

Web based GUI; CLI for local and console access; password protected; SNMP v1/v2 (RFC 1157/1901/1905) agent and MIB (RFC 1213/1493); EFM OAM (IEEE 802.3af); Software upgradeable via web-browser/TFTP

### Front Panel Indicators

Power, Alarm, Diagnostic, WAN Link (x4), Ethernet Link (x4), Ethernet 100M (x4)

### Power Supply

AC: Universal Input (UI)—90–240 VAC (50–60Hz)

### Compliance

FCC Part 15A, CE Mark, EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC

### Environment

Operating Temperature: 0–50°C  
Storage Temperature: -40–85°C

### Dimensions

7.67L x 1.89W x 6.61D in.  
(195L x 48H x 168D mm)

### Weight

2.86 lbs (1300 g) without power supply

## Ordering Info

**3202/2W/EUI:** G.SHDSL 2Base-TL EFM Modem (2-wire), 5.7 Mbps

**3202/4W/EUI:** G.SHDSL 2Base-TL EFM Modem (4-wire), 11.4 Mbps

**3202/8W/EUI:** G.SHDSL 2Base-TL EFM Modem (8-wire), 22.8 Mbps

**3202/2W/EUI-2PK:** G.SHDSL 2Base-TL EFM Modem Pair (2-wire), 5.7 Mbps

**3202/4W/EUI-2PK:** G.SHDSL 2Base-TL EFM Modem Pair (4-wire), 11.4 Mbps

**3202/8W/EUI-2PK:** G.SHDSL 2Base-TL EFM Modem Pair (8-wire), 22.8 Mbps