



# Leased Line Extender over IP

## SmartNode™ 2290 Series

*The SmartNode™ 2290 series saves leased line costs extending up to four audio lines between two locations using best effort networks even the Internet.*

### Service Providers

*Offer the same old analog leased line service on the Internet with highly reduced capital and operational expenditure even as you migrate away from TDM*

### Enterprises

*Enjoy the benefits of using leased lines on Enterprise IP networks without the hassles of telephone wires*

### Security

*Connections are always ON and securely encrypted with IPsec and IKE*

### Quality of Service

*Advanced Traffic Management and Shaping, combined with Patton's DownStream QoS™ enforce uninterrupted toll-quality voice over best-effort networks*

### Access Router Functions

*Integrated Access router functions with NAT, Firewall, ACL, PPPoE, DHCP, DynDNS and VLAN*

### Easy to Monitor and Control

*In-Band (RS-232 Console Port) and Out-of-Band Management Capabilities (TELNET and HTTP)*

The 2290 Series Leased Line Extender is a SmartNode that enables end users to deploy Leased-line applications like an Always On connection even on the Internet. Using only one Extender on each side, audio Leased-Lines can be transported over a packet-based network. This means: Internet connection in two different locations around the world is sufficient to establish up to four Leased-Lines between these two locations!

Many Service Providers are moving away from their TDM backbone networks and their Analog leased lines offerings. The 2290 series offers Service Providers a chance to offer the same services like Always ON connections on Analog leased lines over their IP based networks.

To Enterprises, it offers a chance to move to best effort networks like the Internet and

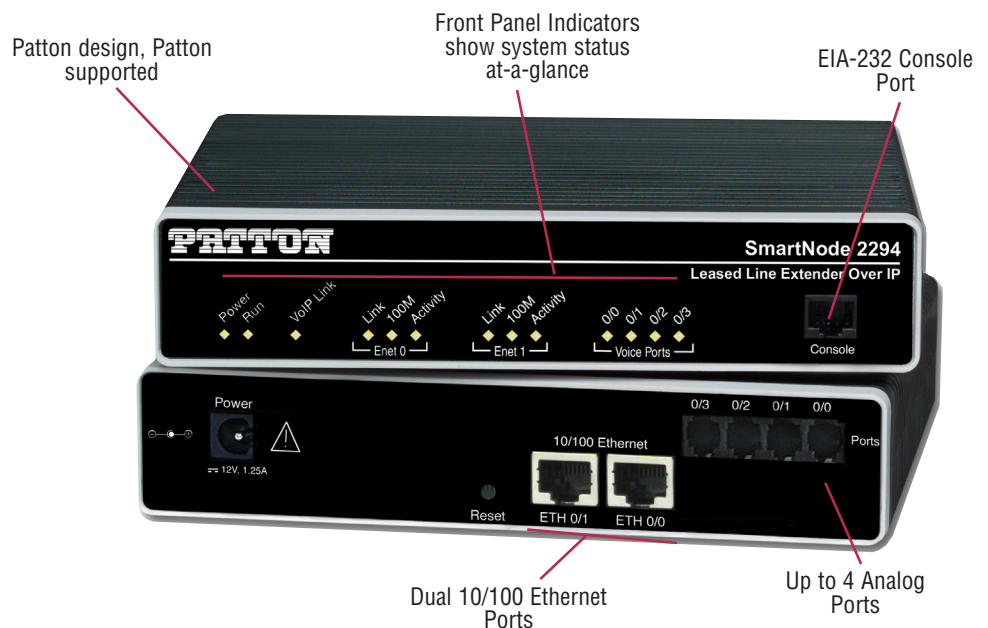
enjoy the same benefits of using Analog Leased Lines on the existing LAN network they have already deployed. In addition, it allows them to use LANs to provide Intra-Office Always ON lines instead of a dedicated web of telephone wires.



*Special Rates Available  
Call for Details*

After installation, the connection between two 2290 extenders can establish immediately. It also reestablishes after any network disruption. The connection can also be secured with Hardware-Accelerated 3DES or AES encryption end-to-end between the extenders, preventing wiretapping and making Patton the right choice for security conscious enterprises.

Visit [www.patton.com](http://www.patton.com) for more information.



## Typical application



Patton SmartNode Models 2292 and 2294 are equipped with two Ethernet ports and provide gateway and Voice-over-IP line extension services.

## Specifications

### Capacity

2 VoIP lines (2292) • 4 VoIP lines (2294)

### Audio connectivity

2-wire RJ-11 • Bandwidth 4kHz • Impedance 600-ohm • Narrow Band FXS style hybrid transmit/receive

### Data Services

Two 10/100 Ethernet ports • Complete IP access router • DHCP Client & server • Packet fragmentation •

Static firewall, NAT, NAPT RFC 1631 access control lists • DMZ port • IPsec, IKE, AES/DES/3DES Encryption

### Quality of Service

Audio priority • DownStreamQoS™ • Traffic management, shaping and policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q, VLAN tag insertion/deletion (simultaneous support of multiple VLANs)

### Voice Signaling

SIPv2 (B2BUA capable, multi-instance, simultaneous support of multiple regis-

trars and direct IP dialing) • SIP call transfer, redirect • DTMF in-band & out-of-band

### Voice Processing

CODEC G.711 a-law/mu-law, G.723, G.729ab, • G.726, G.727.

### Management

Web/HTTP, CLI with local console and remote Telnet access • TFTP configuration & firmware loading • SNMP MIB II and product MIB • Secure Mass provisioning for both firmware and unit configuration • Built-in diagnostic tools (trace, debug, call generator)

### System

CPU Motorola MPC875 @66MHz • Memory 32MB SDRAM/8MB Flash • Power 100–240 VAC (50/60Hz) • Power dissipation 4– 8W, model dependent

### Temperature

32–104°F (0–40°C)

### Humidity

5–80%, non-condensing

### Compliance

CE Compliance

## Ordering Information

**2292/ EUI :** 2 VoIP leased line channels, External Universal Input Power Supply

**2294/ EUI :** 4 VoIP leased line channels, External Universal Input Power Supply

\* Specifications subject to change without notice.

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