

The PROSCEND logo is located at the top left of the page. It features the word "PROSCEND" in a bold, blue, italicized sans-serif font, with a registered trademark symbol (®) to its upper right. The background of the entire page is a collage of digital and network-related imagery, including a world map, binary code (0s and 1s) in green, a glowing globe, and abstract network diagrams with arrows and nodes.

5600 Series

2BASE-TL EFM Network Extender

Descriptions

PROSCEND 5600 series EFM Network Extender is designed to provide bonded high-speed Ethernet First Mile services over SHDSL on existing copper infrastructure. It is a bridge mode modem that delivers Ethernet services with symmetrical bandwidth at rates up to 22.8 Mbps. Implemented based on IEEE 802.3ah EFM standards for advanced performance and management features, 5600 Series ensures high reliability, low expense and maximum throughput.

The introduction of EFM copper bonding technology allows delivery of higher bandwidth to longer distances over multiple copper pairs, enabling a good alternative in place where fiber is not economical to deploy. This "Ethernet-pure" solution provides a seamless integration into today and tomorrow's networks.

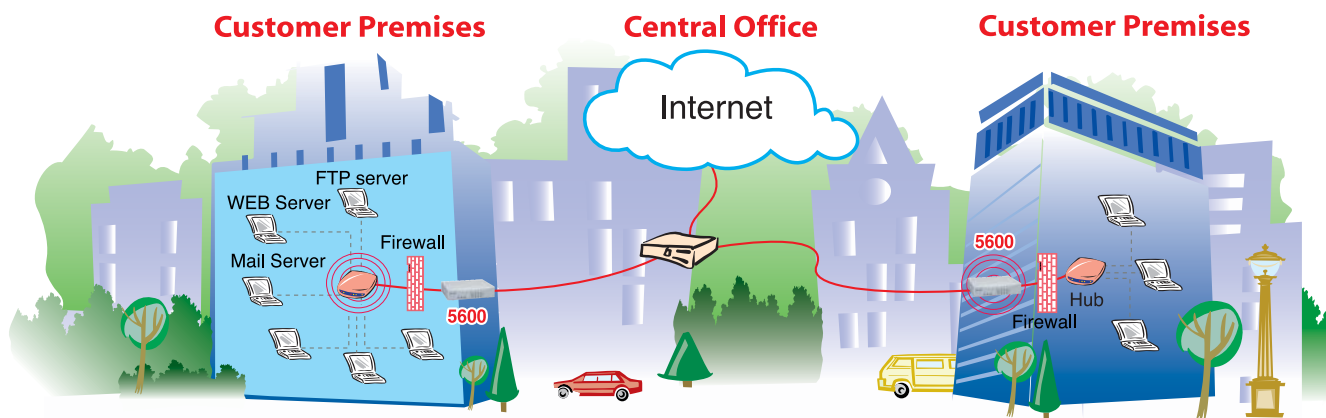
PROSCEND 5600 series extends the reach of Ethernet services to the sites by using bonded copper pairs. Up to 4 pairs can be bonded together for aggregated bandwidth over 22Mbps. Designed with standard-based EFM technology (2BASE-TL), deployment of Ethernet services with PROSCEND 5600 is quick and simple on the existing copper plant. It operates mainly in Point-to-Point connection between remote office and enterprise headquarters, providing symmetrical high-speed connectivity that is ideal for large and small-to-medium enterprises to deliver business-class Ethernet service.

With **PROSCEND 5600** EFM Network Extender, network performance is significantly enhanced by eliminating unnecessary conversion of packet formats when transiting between Ethernet (LAN) and legacy ATM network (WAN). Service providers and enterprises should see lower capital expenditures because their networks won't need equipment to convert between the ATM and the Ethernet protocol. User-friendly Ethernet also make it possible to save unnecessary truck roll costs and training costs. It leads to minimized risk bearing and quick return on investment for both service providers and enterprises

PROSCEND 5600 LAN port is interoperable with any standard Fast Ethernet interfaces from switches, routers, and NG-SONET/SDH Equipment. The management interfaces include comprehensive command-line interface (CLI), user-friendly GUI-based Web Browser Interface, SNMP and Telnet.

PROSCEND 5600 Series provides future-proof features meeting Ethernet Quality of Service (QoS) and Class of Service (CoS) requirements by utilizing 802.1q VLAN capabilities, four levels of priorities, traffic flow control and rate control. This traffic management and QoS features enable service providers to offer highly profitable and value-added services to a vast majority of business and institutional sites.





Features

- Extending Ethernet Services to sites with existing copper infrastructure
- EFM Bonding (PAF, PME Aggregation Function) up to 22.8Mbps (4 pairs)
- Flexible and Rapid Service Deployment
- Flexible configuration as CPE or CO
- Support EFM OAM complying IEEE 802.3ah
- Low Delay, Jitter and Packet Loss for delay sensitive applications
- Comprehensive and easy OAM & P functions in provisioning and management
- QoS feature for guaranteed Ethernet service
- Future-proof Ethernet traffic management and QoS features

Applications

- Metro Ethernet Extension
- Fast Internet Access
- Transparent LAN Services
- Leased Lines Replacement

Specification

5600 Series 2BASE-TL EFM Network Extender

Network Interface

- LAN
- 4 – port switching hub
 - 10/100BASE-T auto-negotiation & sensing
 - Auto MDI/MDI-X
- WAN
- ITU-T G.991.2.(2004)
 - 2BASE-TL
 - EFM bonding (IEEE 802.3ah PAF)
 - Data Rate: N x64 Kbps(N=3~89) as 2 wire model
N x128 Kbps(N=3~89) as 4 wire model
N x256 Kbps(N=3~89) as 8 wire model
 - Support of Annex A , Annex B , Annex AF & Annex BG
 - Impedance: 135 ohms

LAN Protocols

- 802.1d Transparent Bridging
- Up to 2K MAC Address learning bridge

Hardware Interface

- DSL : RJ-45 x 1
- LAN : RJ45 x 4
- MGMT: RJ45 x 1
- Console Port x 1
- Reset Button : Load Factory Default
- DC Power Jack x 1

Indicator

- LAN : Link/Act, 10/100 per port
- WAN: Link per loop
- System: Power, Alarm, MGMT

Management Interface

- Easy to use web-based GUI for quick setup, configuration and management
- Menu-driven interface/Command line interface (CLI) for local console and telnet access
- Password protected management and access control list for administration
- SNMP v1/v2 (RFC 1157/1901/1905) agent and MIB II (RFC 1213/1493)
- EFM OAM (IEEE 802.3ah)
- Software upgrade via web-browser/TFTP

VLAN Support

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

QoS Support

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

Environment

- Operating Temperature: 0° ~ +50°
- Extended Operating Temperature: -20° ~ +45°
- Storage Temperature: -40° ~ +85°
- Relative Humidity: 98%, non-condensing

Regulatory

- ISO 9001 Quality Management
- CE Approval & EN60950 Certificate

Physical / Electrical

- Dimension (mm): 195 x 48 x 168
- AC Power Adapter (90~240VAC with 50~60Hz)
- Weight: 5610E: 1300g, 5620E: 1320g , 5640E :1340g

Memory

- 2MB Flash Memory , 4MB SDRAM

Ordering Information

- 5610E: 1-pair 2BASE-TL EFM Network Extender
- 5620E: 2-pair 2BASE-TL EFM Network Extender
- 5640E: 4-pair 2BASE-TL EFM Network Extender

*Features and specifications are subject to change without notice

PROSCEND[®]
Proscend Communications Inc.

2F, No.36, Industry East Road IV, Hsinchu Science Park, Hsinchu, Taiwan. 300
Tel: +886-3-5639000 Fax: +886-3-5633830 Email: sales@proscend.com

www.proscend.com