



Network Extender
Technologies

NETWORKEXTENDER.COM

E1 Inverse Multiplexer 2000

EIM2000-24, EIM2000-12

Standard E1 Access with Loop Bonding for the IPD12000(E) and IPD4000(E)

Overview

Net to Net Technologies' E1 Inverse Multiplexer provides high-speed symmetrical data solutions over standard E1 lines for Net to Net's IPD12000(E) and IPD4000(E) IP DSLAMs. Fully compliant with Net to Net's DSL The Easy Way™ technology, the EIM2000 is 100% Ethernet-based and fully plug 'n' play.



The EIM1500 is available in both 24 and 12 port versions. The 24-port version is only supported in the IPD12000E and IPD4000E. The 12-port version is supported in all of Net to Net's modular chassis, including the IPD12000, IPD12000E, IPD4000, and IPD4000E. The IPD12000E and IPD4000E were introduced in June 2003, while the IPD12000 and IPD4000 were introduced in January 2000.

The EIM1500 also supports Net to Net's Loop Bonding functionality, which provides the network operator the ability bond together multiple E1 lines to incrementally increase bandwidth to/from a remote location or customer premise. Using a Net to Net Loop Bonding compliant CPE (such as the ENE2020-S, the EIM2000 will automatically bond E1 lines, requiring no configuration for the network operator. Additionally, Net to Net's Loop Bonding technology provides automatic failover and recovery should one of the E1 circuits incur a fault.

E1 is an ideal high-speed symmetrical data solution for the small to medium sized business customer. The EIM1500 provides 12 or 24 standard E1 interfaces allowing service providers to support E1 users as well as DSL users in the same IP DSLAM. Native E1 support also ensures reachability to all users, regardless of location or proximity to Telco Central Offices. Fractional E1 support also allows service providers flexible bandwidth options for selectable service offerings.

The EIM2000 can also provide high-bandwidth backhaul aggregation for remote DSLAMs in Remote Terminals or Street Cabinets. For example, a Net to Net's AμD8000-12 located in a Remote Terminal can utilize a dual E1 backhaul, delivering up to 4 Mbps of data to the Remote Terminal.

Features

- Utilizes Net to Net's DSL The Easy Way™ Ethernet-based Architecture for plug 'n' play configuration and operation
- EIM2000-12 provides 12 fixed E1 ports supporting standard E1 or Fractional E1 lines for the IPD12000(E) or IPD4000(E)
- EIM2000-24 provides 24 fixed E1 ports supporting standard E1 or Fractional E1 lines for the IPD12000E and IPD4000E only
- Supports Net to Net's Loop Bonding technology for incremental bandwidth
- Delivers E1-based data access or backhaul connections
- Unlimited distance support
- Hot swappable module
- Embedded web-based management system for easy, platform-independent remote management
- Full 802.1Q VLAN support for easy to provision VPNs
- Supports Net to Net's IP Quality of Service (QoS) features
- Integrated CSU/DSU saves time, money and rack space

Specifications

Dimensions

12.75" (32.4cm) High x 1.15" (2.9cm) Wide x 16.75" (42.5cm) Deep

Weight

5.6 lbs (2.5 kg)

Power

-48V DC 0.6A supplied by host chassis -- 12-port
-48V DC 0.8A supplied by host chassis -- 24-port

Interfaces

12 or 24 E1 Ports (1 (IPD12000 and IPD4000) or 2 (IPD12000E and IPD4000E) RJ21 50-pin Telco connectors)
2 IP DSLAM Backplane Interfaces
Integrated CSU/DSU
DSL The Easy Way™ compliant

Standards Support

IEEE 802.3 Ethernet
IEEE 802.1Q VLANs
ITU G.704 E1

Protocol Support

Framing: ESF; SF/D4
Line Coding HDB3; AMI
Local or Loop Timing

Bandwidth/Distance

Selectable to 256Kbps, 512Kbps, 768Kbps, 1,024Kbps, 1,280Kbps, 1,536Kbps, 1,792Kbps, 1,984Kbps
Unlimited Distances (utilizes standard E1 circuits)

Regulatory Compliance

NEBS: GR-63-CORE, GR-1089-CORE
EMC: FCC Part 15; CSA/C108.8; EN55022; EN55024
CE Marking
Safety: UL1950, CSA C22.2 No. 950; EN60950
CE Marking

Operating Requirements

Temperature: 32°F to 122°F (0°C to 50°C)
Non operating temperature: -40°F to 158°F (-40°C to 70°C)
Humidity: 5% to 95%, non-condensing
Altitude: -200ft to 16,500ft (-60m to 5,000m)

Ordering Information

EIM2000-24	24-port E1 Inverse Multiplexer module for the IPD12000E and IPD4000E (not supported in IPD12000 and IPD4000)
EIM2000-12	12-port E1 Inverse Multiplexer module for the IPD12000(E) and IPD4000(E)

