

24-port SHDSL MiniDSLAM
SMD2000-24T-DC, SMD2000-24E-DC



Delivering Symmetrical DSL to the Small Business and Home Office from a native IP DSLAM

Overview

Paradyne's SMD2000-24 is a 24-port, small form factor MiniDSLAM that delivers symmetrical data rates at up to 2.3 Mbps per port. The SMD2000-24 is ideal for deploying high-speed, business class SHDSL in a Remote Terminal/Street Cabinet, or as a small-scale Central Office or in-building DSL solution.

Designed specifically for Remote Terminal/Street Cabinet collocation, the SMD2000-24 is environmentally hardened, remotely manageable, and only requires a single rack unit (1.75" or 1 "U"). The SHDSL MiniDSLAM can utilize the existing T1/E1 technology within Digital Loop Carrier (DLC) systems for data backhaul to the main Central Office. Telcos are now able to deploy extremely high-speed SHDSL services to those service areas served through DLCs. The T1/E1 backhaul capability means that the SHDSL MiniDSLAM provides a solution for rural areas where previously DSL deployment was uneconomical due to the high cost of OC-3/12 backhaul costs. This opens exciting new opportunities for the Competitive Operator or ISP in these locations.

The SMD2000-24 provides 24 individual single copper pair SHDSL lines, allowing for data rates ranging from 144Kbps up to 2.3Mbps symmetrical bandwidth at distances up to 24,000 feet/7,315 meters on each port.

The SMD2000-24 supports Paradyne's Loop Bonding technology, which allows the service provider to bond multiple copper pairs for bandwidths up to 27 Mbps to a single subscriber, when using a SHDSL CPE with loop bonding support, such as the SNE2020G-S or SNE2040G-S or using the 6 and 12 port MicroDSLAMs configured as CPEs, enabling anything from 2 to 12 lines to be bonded together delivering 2.3 Mbps per line.

Supporting a choice of 10/100 Ethernet, T1/E1, dual T1/E1, and DS3/E3 backhaul technologies, the SMD2000-24 can be deployed in a variety of network designs and can cost-effectively deliver high-speed SHDSL in locations where subscriber counts do not justify a chassis-based solution.

There is a choice of management options for the SMD2000-24, including web-based NMS, standard SNMP, as well as support through CLI and Telnet. The SMD2000-24 has one RJ-45 10/100 management port that also provides bridging uplink capability, and one RJ-45 RS-232 COM port for local connections to the CLI. In-band and out-of-band management are both supported.

Features

- Utilizes DSL The Easy Way™ Ethernet-based Architecture for optimum throughput and plug 'n' play operation
- 24 fixed SHDSL ports supporting up to 2.3Mbps per port (symmetrical)
- Supports distances up to 24,000 feet/7,315 meters
- Supports Loop Bonding from 2 to 24 ports providing up to 27 Mbps over 12 bonded copper pairs.
- Can be set to 'subscriber' mode, providing a loop-bonded CPE
- Operates with SNE2000G-S (1 pair), SNE2020G-S (Loop Bonding, 2 pairs), and SNE2040G-S (Loop Bonding, 4 pairs), and the 6 and 12 port MicroDSLAMs configured as CPEs, enabling anything from 2 to 12 lines to be bonded together
- Two fixed T1 (SMD2000-24T) or E1 (SMD2000-24E) Loop Bonding capable ports provide up to 3.0 or 4.0 Mbps data backhaul
- IP QoS Support for Traffic Management and Prioritisation
- Full 802.1Q VLAN/802.1p Priority support for easy to provision VLANs and QoS
- Optional Redundant 10/100 Uplink Interface Module (UIM)
- Fixed 10/100 management port which can also provide a bridging uplink
- Redundant -48V DC Power; external power supplies required for AC power applications (EPC-AC-2.5A)
- Extremely compact chassis (1.75" high) is environmentally hardened for use in Remote Terminals/Street Cabinets
- Embedded web-based management system for easy, platform-independent remote management and SNMP for remote monitoring

Specifications

Dimensions

1.75" (4.4cm) (1 Rack Unit) High x 17" (43.2) Wide x 14" (35.6) Deep

Weight

DC — 12.6 lbs (5.73 kg)

Power

DC — -48V DC; 2.5A Max

Actually power draw depends on configuration

AC- Requires external power converter (EPC-AC-2.5A recommended)

Interfaces

24 SHDSL Ports (1 RJ21 50-pin Telco)

2 Uplink Interface Module (UIM) slots supporting:

· 10/100 Ethernet (UIM-10/100)

10/100 RJ-45 Ethernet Management Interface (also provides bridging uplink)

RJ-45 RS-232 COM port

Two fixed RJ-45 T1/E1 uplink ports

Standards Support

Ethernet 802.3

Protocol Support

ITU G.992.1 (Layer One only)

802.1Q

802.1p

IP QoS - - Configurable Priority scheme 802.1p, DiffServ, IP address range, Rate Limiting

Bandwidth/Distance

Selectable to 144Kbps, 272Kbps, 400Kbps, 528Kbps, 784Kbps, 1040Kbps, 1552Kbps, 2064Kbps, 2320Kbps

Distances up to 24,000ft/7,315m @ 144Kbps

Loop Bonded ports provide the same distance/bandwidth support

Regulatory Compliance

NEBS: GR-63-CORE, GR-1089-CORE

EMC: FCC Part 15; CSA/C108.8; EN55022; EN55024

Safety: UL1950, CSA C22.2 No. 950; EN60950

CE Marking

Operating Requirements

Temperature: -40°F to 149°F (-40°C to 65°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

SMD2000-24T-DC	24-port SHDSL MiniDSLAM, G.SHDSL (TC-PAM) Encoding, Includes (2) T1 Uplinks and Supports (2) Uplink Interface Modules (UIMs); DC power
SMD2000-24E-DC	24-port SHDSL MiniDSLAM, G.SHDSL (TC-PAM) Encoding, Includes (2) E1 Uplinks and Supports (2) Uplink Interface Modules (UIMs); DC power



For additional information on this or any Paradyne product or service, contact the office nearest you or dial 1.800.727.2396 (USA and Canada) or 1.727.530.8623; fax 1.727.530.8216. For international locations, visit the Paradyne web site at <http://www.paradyne.com>