

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

Zhone's SMD2000-24 is a 24-port, small form factor unit designed for use as either a 1U Mini-DSLAM or a high-density bonded CPE. The SMD2000-24 delivers symmetrical data rates at up to 2.3 Mbps per port, with the ability to bond all 24 ports for massive high speed trunks of 55Mbps. Because of the SMD2000's flexibility, it is ideal for deploying high-speed, business class SHDSL in a Remote Terminal/Street Cabinet; for use as a data backhaul solution for other network devices or IP-managed equipment; or as a small-scale Central Office or in-building DSL solution.

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. Using Loop Bonding technology, the SMD2000 allows the service provider to bond multiple copper pairs for bandwidths up to 55 Mbps to a single subscriber. Compatible CPE include the SNE2000G-S for single line applications, or the SNE2020G-S, SNE2040G-S, SMD2011-12 or another SMD2000-24 for bonded applications.

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.

Features

Provides plug 'n' play operation, including automatic loop bonding lines with NO configuration requirements
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 55 Mbps over 24 bonded copper pairs.

Can be set to 'subscriber' mode, for use as a 24-pair loop-bonded CPE

Operates with SNE2000G-S (1 pair), SNE2020G-S (Loop Bonding, 2 pairs), SNE2040G-S (Loop Bonding, 4 pairs), SMD2011-12 (Loop Bonding, 12 pairs), or another SMD2000-24 (Loop Bonding, 24 pairs), enabling anything from 1 to 24 lines to be deployed to a single subscriber

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

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