

2300 SHDSL SERIES



> THE 2300 SHDSL SERIES FAMILY PROVIDES ENTERPRISES OR OPERATORS WITH A VERY HIGH-DENSITY SHDSL TRANSMISSION SOLUTION AT THE CENTRAL OFFICE OR IN CONCENTRATOR SITES.

It is possible to use variable bit rates as well as dual pair operation to extend the reach of the transmission over longer distances. Data is delivered over G.703/G.704 interfaces and both transparent and fractional operation is supported. In case of service delivery at speeds lower than 2 Mbps, grooming (concentration) of different users on a single E1 circuit can be provided. The dedicated 2300 concentrator with remote powering can be used to power repeaters or network termination equipment.

The unit is designed for integration into demanding network environments and can be directly controlled by the complete set of network maintenance and management tools as they are described in the section on network management. For management purposes the concentrator features a direct 10/100Base-T connection for IP, a local console interface, and G.703/G.704 interface.

Typical applications in a carrier environment include the provisioning of high-quality data services like leased lines or Frame-Relay and the concentration of multiple circuits interconnecting base-stations of a mobile operator. Enterprises or organisations with own copper infrastructure can use this type of equipment to meet their own communication requirements without having to invest in a new transmission infrastructure.

FEATURES & BENEFITS

- > SMALL HIGH-DENSITY SHDSL CONCENTRATOR
- > UP TO 24 SHDSL PAIRS IN 1 UNIT-HIGH ENCLOSURE
- > 1 OR 2 PAIR OPERATION
- > UP TO 24 G.703 E1 UP-LINKS WITH POSSIBILITY FOR GROOMING
- > VARIABLE BIT RATE AND MULTIPLE PAIR OPERATION FOR EXTENDED REACH
- > REMOTE POWERING CAN BE PROVIDED AS AN OPTION

LINE INTERFACE

- > Single pair or two pair line access
- > Remote power feeding* under management control
- > Connector: 50 pin telco connector with 8, 16 or 24 line pairs
- > Impedance: 135 ohm
- > Coding: TC PAM, compliant to ITU-T G.991.2 (G.SHDSL) and ETSI TS 101524
- > Line speeds: Single pair: N x 64 kbps (N = 3 ... 32)
Two pair: N x 128 kbps (N = 3 ... 16)
- > Handshaking: compliant G.994.1 (automatic speed negotiation) or fixed speed
- > Performance monitoring: compliant G.826 (errored seconds, severely errored seconds, unavailability seconds)

IDEAL MAXIMUM DISTANCE (NOISE-FREE)

1 pair	2 pair	0.4mm	0.5mm	0.6mm	0.8mm	1.0mm	1.2mm
Speed (kbps)	Speed (kbps)	26AWG (km)	24AWG (km)	20AWG (km)	18AWG (km)	(km)	(km)
256	512	8.2	8.2	11.3	16.0	20.3	28.5
512	1024	7.2	9.9	14.0	17.8	25.0	27.7
1024	2048	5.5	7.6	10.7	13.6	19.1	21.2
1536	3072	4.0	5.5	7.8	9.9	13.9	15.4
2048	4096	4.2	5.8	8.2	10.4	14.6	16.2

REMOTE POWER FEEDING*

- > According to ITU-T K.15
- > Controlled by network management
- > Maximum standard remote power voltage: 120 Vdc
- > Maximum standard remote power current: 60 mA
- > Conform IEC60950-21 Edition 2002-12

APPLICATION INTERFACE

- > 8, 16 or 24 balanced 120 ohm interfaces concentrated on DB25 female (ISO 2110)
- > Electrical: G.703
- > Unframed or framed operation (G.704)
- > User speed: (F)E1 Nx64 kbps (N = 1 ...32)
- > Grooming possibility per set of 8 SHDSL lines

MAINTENANCE AND NETWORK MANAGEMENT INTERFACES

- > Local 9-pin sub-D connector
- > Local RJ45 - Ethernet connector
 - > Compliant with IEEE 802.3 10Mbps HDX/FDX Ethernet
 - > Compliant with IEEE 802.3u 100Mbps HDX/FDX Ethernet
 - > >10/100Mbps auto-sense
- > G.703/G.704 RJ45 interface

FRONT PANEL INDICATIONS

- > PWR: Power indication for each power inlet
- > LAN: Lan status
- > STCLK: Station clock status
- > DCD: Data Carrier Detect for each SHDSL line
- > G.703: LOS/AIS/Data for each G.703 interface

CLOCKING

- > Internal
- > External (from G.703)
- > Station clock (with possibility for fallback)

MAINTENANCE AND MANAGEMENT SUPPORT

- > Conform TMA management suite
- > 2 alarm contact outputs (normally open and closed contacts)
- > 7 alarm input contacts with common return (normally closed contacts)

MECHANICAL DATA (H X W X D)

- > 44 x 440 x 240 mm (desktop)
- > Rack-mount kit included
- > Weight: 3.5 kg

POWER REQUIREMENTS

- > -48Vdc, with possibility for connection of redundant power source,
- > Power consumption: 2301 SHDSL concentrator: 15W
2303 SHDSL concentrator: 50W
Units with remote powering: 260W max

*Only on specific models

SALES CODES

- > 181299 Telindus 2301 (8 SHDSL modems)
- > 181301 Telindus 2303 (24 SHDSL modems)
- > 185881 Desk-top Power supply module 70W (230/115Vac -> 48Vdc)
- > 182590 CBL Telco M /wires 24*2*0,14 120* 2M

Telindus 2302 (16 SHDSL modems) and units with remote powering on request