

2300 SHDSL SERIES



> THE TELINDUS 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 INTEGRATES IN A 1 UNIT ENCLOSURE UP TO 24 SHDSL TRANSMISSION PAIRS WITH UP TO 24 G.703 E1 BACKHAUL CONNECTIONS.

It is possible to use variable bit rates to extend the reach of the transmission over longer distances. Data is delivered to the backbone network on G.703/G.704 interfaces on

which 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 specific 2300 concentrator model incorporating remote powering can be used to power repeaters or network termination equipment, like specific versions of the Crocus SHDSL family.

For management purposes the concentrator features a direct 10/100Base-T connection for IP, a local console interface, and a G.703/G.704 interface.

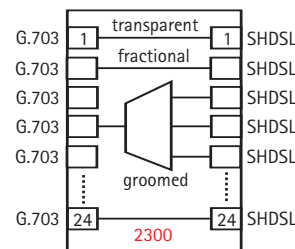
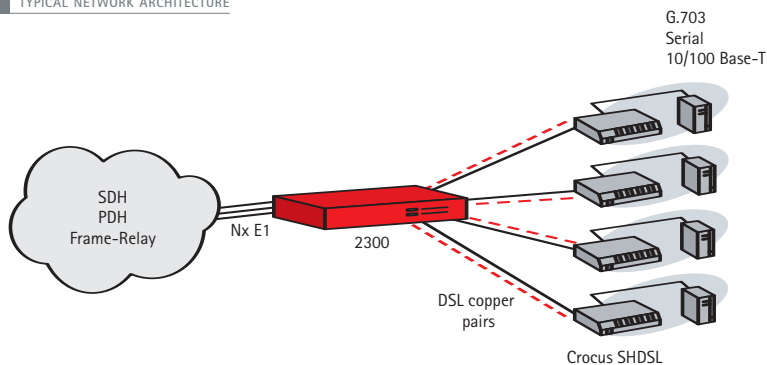
The equipment supports different management interfaces on different levels of the network.

At the local level it is possible to manage the equipment over a management console interface by means of a PC maintenance tool (TMA), a command line interface or a menu driven interface.

On IP level the equipment supports Telnet, SNMP, HTTP or TFTP/FTP. In this way it is possible to integrate the unit in any existing network management environment.

At the network level it is possible to manage the access network with a stand-alone element manager or with an element manager integrated into HP OpenView.

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
- > UP TO 24 G.703 UP-LINKS WITH POSSIBILITY FOR GROOMING
- > VARIABLE BIT RATE OPERATION FOR EXTENDED REACH
- > REMOTE POWER FEEDING 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: N x 64 kbps (N = 3 ... 32)
- > 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	0.4mm	0.5mm	0.6mm	0.8mm	1.0mm	1.2mm
Speed	26AWG	24AWG	20AWG	18AWG		
(kbps)	(km)	(km)	(km)	(km)	(km)	(km)
256	8.2	11.3	16.0	20.3	28.5	31.6
512	7.2	9.9	14.0	17.8	25.0	27.7
1024	5.5	7.6	10.7	13.6	19.1	21.2
1536	4.0	5.5	7.8	9.9	13.9	15.4
2048	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

G.703 DATA INTERFACES

- > 8, 16 or 24 balanced 120 ohm interfaces concentrated on DB25 female (ISO 2110)
- > Applicable standards: ITU-T G.703, G.704, G.823, G.826
- > CRC4 insertion & monitoring
- > Unframed or framed operation (G.704)
- > User speed: (F)E1 Nx64 kbps (N = 1 ...32)
- > Grooming possibility per set of 8 SHDSL lines

CLOCKING

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

G.703 MANAGEMENT INTERFACE

- > Connector: RJ45, balanced 120 ohm
- > Electrical: G.703
- > Management encapsulation protocols: PPP, Frame-Relay, HDLC
- > Unframed or framed operation (G.704)

LAN INTERFACE (FOR MANAGEMENT ONLY)

- > Compliant with IEEE 802.3 10Mbps HDX/FDX Ethernet
- > Compliant with IEEE 802.3u 100Mbps HDX/FDX Ethernet
- > 10/100Mbps auto-sense
- > RJ45 Unshielded Twisted Pair (UTP)

CONTROL INTERFACE

- > Applicable standards: ITU-T V.24, V.28, EIA/TIA 574
- > DCE signals: RXD, TXD, SGND
- > Connector: female DB9

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

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

ENVIRONMENTAL CONDITIONS

- > Non remote powering versions: -10°C.. +50°C
- > Remote powering versions: -10°C .. +35°C

*Only on specific models

SALES CODES

- > 181299 Telindus 2301 (8 SHDSL modems)
- > 181302 Telindus 2321 RP (8 SHDSL modems with remote power feeding)
- > 181301 Telindus 2323 (24 SHDSL modems)
- > 181304 Telindus 2323 (24 SHDSL modems with remote power feeding)

Telindus 2302 (16 SHDSL modems) on request

SALES CODES: CABLES

- > 182955 50pin telco - copper wires, 1 meter
- > 182590 50 pin telco - copper wires, 3 meter
- > 182956 50 pin telco - copper wires, 5 meter