SHDSL Transport Unit

The DynaFlex SHDSL-T is a TDM based SHDSL Line Terminal for standard, unconditioned copper wire local loop environment in point-to-point applications

The SHDSL-T is a TDM based transport unit capable of carrying up to 4 x E1 circuits independently over twisted pair copper lines.

It provides N x 64 kbit/s access to the digital trunk network and conveys user data either transparently or in a G.794/2M frame structure over the subscriber lines.

The equipment side of the SHDSL-T unit consists of 4 x E1 interfaces compliant to the ITU-T G.703/G.704 standards.

On the subscriber line side, the SHDSL-T uses the highly sophisticated TC-PAM line coding according to the ITU-T G.991.2 standard.

The SHDSL-T unit integrates fully with the Avara DynaFlex access platform at both transmission and management levels.

The SHDSL-T can operate as a Line Terminating Unit (LTU, STU-C) or a Network Terminating Unit (NTU, STU-R) thus enabling back to back operation.

It features interoperability with 3rd party SHDSL compliant Network Terminals.

SHDSL-T units can be used in applications that require efficient transport of E1 based remote subscriber access over copper lines with the principal application being range extension of the E1 interfaces available on PDH Multiplexers.

With each SHDSL line capable of carrying an E1 circuit , it is the solution of choice in implementing loop and linear transmission networks when the integrity of circuit timing must be maintained.

The SHDSL-T can be managed locally via the console port or remotely using Telnet, SNMP or Avara's ASPeCT over a secure VLAN.

The SHDSL-T can also be managed using the Q1 protocol used to manage Dynanet nodes, allowing this unit to be managed under existing management systems.

Full remote configuration and software download capability for easing upgrades.

A comprehensive set of SNMP traps and alarms are provided to assist fault management and isolation.

Technical Highlights

Interfaces

- 4 x SHDSL (G.991.2) Interfaces
- 4 x G.704/2M Balanced (120 Ω)
- RS-232 console RJ45
- 1 x 10/100 Ethernet for management
- Measurement port or Sync In/Out via SMB

Key Features

- E1 line extension over standard, unconditioned copper wire
- Transparent E1 over SHDSL transport
- Nx64K over SHDSL transport
- TC-PAM line coding
- M-pair bonding
- Pluggable into DynaFlex and Dynanet Mechanics
- Manageable via Q1, Telnet, SNMP & ASPeCT
- -20 to +65 °C operation

SHDSL-T

Technical Specifications

Model Order Code P61121.01 SHDSL-4T-4E1-120	DynaFlex SHDSL Transport Unit, 4 x G.991.2, 4 x E1 120Ω Ohm, Managed	**Security** Data Interfaces Management	Dedicated VLAN Password Protection, Dedicated VLAN
Mechanical Height-Depth-Width	(Excluding handle) 233 x 160 x 25mm	**Power** Power Supply Power Consumption	-20 to -72 VDC 9 W (Max.)
Interfaces 4 x SHDSL ports 4 x E1 ports Ethernet (management) Measurement Out or Sync In or Sync Out	G.991.2 G.703/G.704 2M 75/120Ω 1 x 10/100BASE-T 1 x SMB connector 75Ω	**Alarm Reporting** Front panel LED	Major (red) Minor (yellow) A,B,D and S alarm reported to bus for relay contact activation on PIU
		MTBF	65 Years
		Environmental Operating Temperature Relative Humidity	-20 °C to +65 °C 5-90% (Non-condensing)
Network Timing Node Synchronisation Sync out	Sync In/SHDSL/E1/Internal G.703 2.048MHz	**Standards**	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.1p VLAN Tagging RFC1157 SNMP RFC1213 MIB II RFC854 Telnet RFC783 TFTP EN55022 Class A Emissions EN60950 Safety AS/ACIF S016 EN55024 Immunity EN50082-2 Generic Immunity IEC 61850-3 Immunity ETS 300 019 -1-1 Operational ETS 300 019 -1-2 Storage ETS 300 019 -1-3 Transport A-tick / C-tick / CE Mark
Management Local Remote Q1	CLI via Console (RS-232) Telnet, SNMP, ASPeCT V.11 MI/DI		ITU-T V.11 ITU-T G.703 ITU-T G.704 ITU-T G.823 ITU-T G.732 ITU-T G.796 ITU-T G.797 ITU-T G.991.2

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