

Proscend® 5099G Series G.SHDSL NTU

Description

Proscend 5099G series SHDSL NTU is a telecommunication product designed for carriers and SME users. This series of SHDSL NTUs offers a variety of choices for data interfaces to meet different connection needs. The standalone G.shdsl modems feature E1, Serial and Ethernet interfaces, allowing connection to different DTE types. When equipped with multiple interfaces, the standalone 5099G Series NTU combines user traffic over the SHDSL link. Available DTE combinations include E1+Serial, T1+Serial, E1+Ethernet, T1+Ethernet, Serial+Ethernet, E1+Serial+Ethernet and T1+Serial+Ethernet that can work simultaneously to share the DSL bandwidth.

The SHDSL NTU supports two different connectors for G.703 E1 application that link to TDM service either by balanced 120Ω RJ45 jack or unbalanced 75Ω dual BNCs with bit rates from 64kbps to 2.048Mbps. For T1 connection, the SHDSL NTU offers balanced 100Ω RJ45 Jack to carry bit rates from 64Kbps to 1.544Mbps.

As a Serial interface application, it links to high-speed TDM services by a DB25 interface, which can work as V.35/RS-530 or V.36/X.21 (factory setting) connection. The data rate of DB25 interface is up to 2.304Mbps with one pair copper wires.

For Ethernet interface application, the SHDSL NTU supports 10/100Mbps auto-detected Fast Ethernet with a RJ45 connector, and provides customer premise with LAN to high-speed TDM services. The data rate of LAN interface is up to 2.304Mbps with one pair of copper wires.

The SHDSL NTU can be configured and managed via EOC, or menu-driven VT100 compatible Asynchronous Terminal Interface, either locally or remotely. The SHDSL NTU provides the capability that identifies the maximum line rate supported by the copper loop. This powerful automatic configuration capability makes installation and service provisioning simple and painless. Furthermore, it provides flexible manually setting of the maximum NTU speed at different levels for different customer-tailored service offerings.

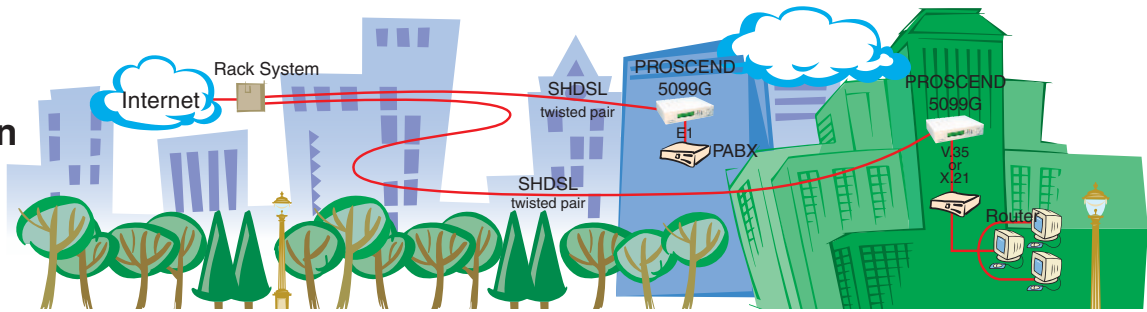
Features

- Standard G.SHDSL (ITU G.991.2) supports improved reach/speed and greater interoperability
- Fast and cost-effective provisioning of traditional frame relay (FR or T-HDLC) or TDM leased line services
- Use existing copper loop infrastructures
- Operate in back to back connection
- Efficient single wire pair usage
- Up to 2.312Mbps symmetric service bit rate
- Auto rate installation maximizes data rate based on loop conditions
- Wetting current sink to protect SHDSL line (Optional)
- Local management interface with LCD display
- Remote line loopback
- SHDSL Line performance monitoring (Data Rate and SNR)
- Raw and per time interval statistics
- Bandwidth guaranteed transmission equipment
- Remote firmware upgrade

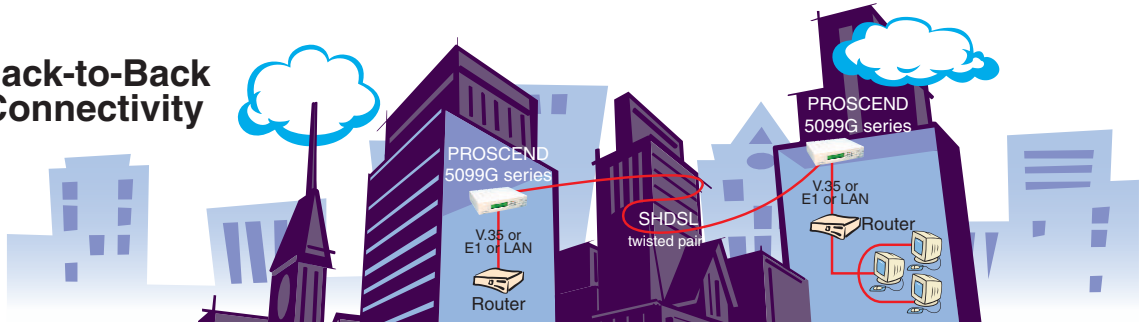


PROSCEND®

Network Connection



Back-to-Back Connectivity



Specification

NTU-5099G Series G.SHDSL NTU

WAN Interface

- Line Rate: SHDSL per G.991.2
- Coding: trellis coded pulse amplitude modulation (TCPAM-16)
- Support: Annex A(ANSI) and Annex B(ETSI)
- Payload rates: 64kbps to 2.304Mbps (N x 64kbps, N=1 to 36)
- Connection: RJ-45 jack
- Impedance: 135 ohms

G.703 Interface (as E1)

- Connection: RJ-48C for balanced 120Ω E1 cable and BNC for unbalanced 75Ω E1 cable
- Line Rate: 2048KHz +/- 50ppm
- Line coding: HDB3/AMI
- Framing: PCM30 / PCM30C / PCM31 / PCM31C and Unframed
- Data Rate: 64Kbps to 2.048Mbps (N x 64Kbps, N=1 to 32)
- Operation: Full E1 and Fractional E1

G.703 Interface (as T1)

- Connection: RJ-48C for balanced 100Ω T1 cable
- Line Rate: 1544KHz +/- 50ppm
- Line coding: B8ZS
- Framing: SF/ESF/Unframed

- Data Rate: 64kbps to 1.544Mbps (N=1 to 24)
- Operation: Clear Channel and Fractional T1

SERIAL Interface

- (as V.35/RS-530 or V.36/X.21)
- Connection: DB-25(F)
 - Payload rates: Up to 2.304Mbps (N=1 to 36)
 - Support V.35/RS-530 or V.36/X.21

LAN Interface (as Ethernet)

- Single Ethernet Interface
- Payload rates: Up to 2.304Mbps (N=1 to 36)
- 10/100Mbps Half/Full Duplex, Auto-sensing, Auto-MDI/MDIX
- Up to 2048 MAC address learning, filtering Bridge

DSL Timing

- Internal
- From E1/T1 Recovery (as E1/T1)
- From DTE (as V.35)

Performance Monitoring

- ES, SES, UAS, LOWS for SHDSL
- ES, SES, UAS for E1/T1
- Alarms and Errors for SHDSL or interface

Management

- Configuration with keypads and LCD display
- Console port (RJ45, RS232C)
- Support firmware upgradeable
- SNMP management via Ethernet port (Optional)

Loopback Tests

(for E1, T1 and V.35 interface only)

- Local Digital Loopback
- Local Loopback
- Remote Line Loopback
- Remote Payload Loopback
- Far-end Line Loopback
- Far-end Payload Loopback
- V.54 Loopback (For V.35 interface only)
- Build-in 2047 bit (211-1) BER Tester

Regulatory

- ISO 9001 Quality Management
- CE Approval & EN60950 Certificate

Physical/Electrical

- Dimensions: 19.8 x 4.6 x 16.8 cm
- AC Input: 90~240VAC with 50~60Hz
- DC Input: -36V~ -72V
- Power Consumption: 10W Max
- Operation temperature: 0 to 50°C
- Humidity: Up to 95% (non-condensing)
- External screw for frame grounding

Ordering Information

Single Interface models

Interface	2-wire
E1	5099G-AC/2W/E1
	5099G-DC/2W/E1
	5099G-DA/2W/E1
Serial	5099G-AC/2W/SER
	5099G-DC/2W/SER
	5099G-DA/2W/SER
Ethernet	5099G-AC/2W/ETH
	5099G-DC/2W/ETH
	5099G-DA/2W/ETH

Multi Interface models

Interface	2-wire
E1+T1	5099G-AC/2W/E1/T1
	5099G-DC/2W/E1/T1
	5099G-DA/2W/E1/T1
E1+Serial+Ethernet	5099G-AC/2W/E1/SER/ETH
	5099G-DC/2W/E1/SER/ETH
	5099G-DA/2W/E1/SER/ETH
E1+T1+Serial+Ethernet	5099G-AC/2W/E1/T1/SER/ETH
	5099G-DC/2W/E1/T1/SER/ETH
	5099G-DA/2W/E1/T1/SER/ETH

5099G-Power/Line/Interface

Power - Specify power supply type

- AC for 90 ~ 240 VAC
- DC for -36 ~ -72 VDC
- DA for DC + AC

Example: 5099G-AC/2W/E1/SER/ETH

Line - Specify line interface

- 2W for 2-wire interface
- 4W for 4-wire interface

Interface - Specify DTE interface types

- E1 for E1 interface only
- SER for V.35/X.21 interface only
- EHT for 10/100BaseT interface only
- E1/T1 for E1/T1 dual interface
- E1/SER/ETH for E1 + V.35/X.21 + Ethernet multi-interface
- E1/T1/SER/ETH for E1/T1 + V.35/X.21 + Ethernet multi-interface



*Features and specifications are subject to change without notice

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