G.SHDSL TDM Family

G.SHDSL E1 Modem



SHDTU03-E1

The CTC SHDTU03 family of G.SHDSL TDM based modems is a telecom product for carriers or SME users. The SHDTU03-E1 offers an ITU-T G.703 DTE interface which works over an SHDSL interface. The modern supports two different connectors for G.703 E1 application (balanced 120 Ohm RJ45 or unbalanced 75 Ohm dual BNCs) at bit rates from 64kbps to 2.048Mbps. The SHDTU03b-E1 can be configured and managed via EOC, or menu-driven VT100 compatible Async. terminal Interface, either locally or remotely.

Ethernet

SHDTU03-ET100

Features

- Supports E1 and fractional E1 over SHDSL
- Standard ITU G.991.2
- Fast and cost-effective services of voice or TDM on a single or two wire pair of existing copper loop infrastructure
- Wetting current to protect copper line (optional)
- Local management interface with console
- Remote line loopback

Application

F1

- E1 performance monitoring and alarm buffer
- G.SHDSL Line performance monitoring (data rate and SNR)
- Raw and per time interval statistics

TDM-based, 2 wires, 2.3Mbps E1 E1 SHDTU03-E1 SHDTU03-E1 E1 V.35 SHDTU03-E1 SHDTU03-V35

Ordering Information

SHDTU03-E1

■ SHDTU03-E1-AC 2wire E1 NTU with 100~240VAC SHDTU03-E1-DC 2wire E1 NTU with -36 ~ -72VDC SHDTU03-E1-AD 2wire E1 NTU with AC+DC power

Specifications

Ports · Line code: 16 level Trellis coded PAM SHDSL Interface • Line data rate : User selectable from 64kbps to 2.304Mbps • Support : ANSI (Annex A) and ETSI (Annex B) • Support wetting current : 4mA-20mA and alarm on failure • Compliance: ITU-T G.991.2 • Line code: HDB3/AMI E1 Interface • Data rate: 64kbps to 2048kbps • Operation: full or fractional

- Impedance: 120 ohms balanced / 75 ohms unbalanced
- Framing: structured with or without CRC-4 or unstructured
- Timing: internal, and G.703
- Compliance: ITU-T G.703, G.704, G.706, G.821, G.823, G.826, CTR12
- Transmit level
 - Pulse amplitude: Nominal 2.37V+10% for 75 ohm / Nominal 3.00V+10% for 120 ohm
 - Zero amplitude: +0.1V
- Transmit frequency tracking
 - Internal timing :+/- 30ppm
 - Loopback timing :+/- 50ppm
 - External timing :+/- 100ppm
- Jitter performance : ITU-T G.823
- Interface connections : BNC for unbalanced, 5 pin wire connector for balanced

• SHDSL PM: ES-crc, SES-crc, UAS, LOSW seconds Performance • E1 PM : ES, SES, UAS seconds • Current 15-minute period and 96 previous 15-minute periods of SHDSL and E1 performance parameters Diagnostic • E1 line loopback / Local SHDSL loopback / Remote SHDSL loopback / Remote payload loopback Management · Configuration with keypads and LCD display • Console port (RJ45, RS232)

• Support firmware upgradeable **LEDs** • PWR, SHDSL, FE1, LOF, LOS, TEST, LOOP, ALARM, and FAR ALARM AC Input: 100~240V Power DC Input: -36 ~ 72V Power Consumption 10W

Dimensions 168 x 195 x 48mm (D x W x H)mm Weight Temperature 0~50°C (Operating) ,0~70°C (Storage) 10~90% non-condensing Humidity Certification **MTBF** 57,000 hours