FE1 CSU/DSU

Loop-E1200
FE1 CSU/DSU SERIES



Features

- DSU functionality integrated with an intelligent CSU
- Loop Telecom's SNMP Network Management Systems
- Connect LAN/WAN, CAD/CAM, or Hosts to 2 Mbps E1 Network Services
- Optional GUI NMS LoopView
- Compliance with ITU-T G.703, G.704, G.706, G.732, G.736, G.823, ETSI ETS 300420, ETS 300419
- RoHS Compliant

Description

Loop Telecom's LOOP-E1200 FE1 CSU/DSU series provides an economic solution to the E1 network access at a fractional cost. The series utilizes only part of 31 data channels and users pay only a fraction of full E1 charges. The LOOP-E1200 FE1 CSU/DSU series supports HDB3 (High Density Bipolar 3) coding and provides continuous error checking, performance polling, and in-service diagnostics. The versatile LOOP-E1200 FE1 CSU/DSU series provides up to four sets of DTE equipment operating rates from 56 to 1984 Kbps and one Drop and Insert DTE operating at E1 (2048 Kbps) to be connected directly to the E1 network services. The series enables users to interconnect LANs and WANs, CAD and CAM, video conference, mainframe hosts, etc..

LOOP-E1200 FE1 CSU/DSU series supports local control and diagnostics with 2 by 40 characters LCD display and keypads. The series enables users to configure the unit, execute in-service diagnostics, and monitor network status and availability. LOOP-E1200 FE1 CSU/DSU series also provides LED status indicators. Loop Telecom supports SNMP by Loop Telecom's SNMP Network Management System to remotely control and diagnose LOOP-ETM products from anywhere in the network. In addition, Loop Telecom also provides an optional Windows based GUI network management system.

Ordering Information

To specify options, choose from list below:

Note: RoHS compliant units are identified by the letter **G** appearing immediately at the end of ordering code.

Model (non RoHS compliant)	Model (RoHS compliant)	SNMP
Loop-E120**x**-**y**-**DTE**-**ww**-SNMP-**pp**	Loop-E120**x**-**y**-**DTE**-**ww**-SNMP-**pp**-**G**	YES
Accessories		
User's Manual		
Loop-E1200-UM	User's Manual (paper, hard copy-optional). A CD version of the manual is already included as standard equipment.	
DTE Card		
E1200-EIA530	E1200-EIA530-**G**	Additional DTE 3/4 (EIA530) Card
Conversion Cable (The conversion cables shown below are RoHS compliant)		
Loop-ACC-CAB-DB25M-30-1M37F		DB25(male) to M34 V.35conversion cable, 30cm
Loop-ACC-CAB-DB25M-30-1DB37F		DB25(male) to DB37 RS449/V.36conversion cable, 30cm
Power Cord (All power cords are RoHS compliant)		
Loop-ACC-PC-USA		AC power cord for Taiwan/USA
Loop-ACC-PC-EU		AC power cord for Europe
Loop-ACC-PC-UK		AC power cord for the UK
Loop-ACC-PC-AUS		AC power cord for Australia
Loop-ACC-PC-CH		AC power cord for China

Where
x = 1 for no D&I, 2 for D&I port
y = 2 for 2 DTE port, 4 for 4 DTE port
DTE = 33 for EIA530 DTE interface
ww = 75 for 75 ohm BNC E1 interface
120 for 120 ohm twisted pair E1 interface
PP = DC for 24 - 48 Vdc
AC for 100 - 240 Vac, 50/60 Hz (For AC choose an appropriate power cord)

Example:
Loop-E 1201-2-33-75-DC =
For model 1200 with no D&I port, 2 DTE ports, E1A530 DTE interface with DB25 connector, 75 ohm BNC E1 interface, no SNMP option, DC power.

NOTE: Order conversion cable for RS449/V36 and X.21.

LOOP-E1200/ 200 FE1 CSU/DSU SERIES PRODUCT SPECIFICATIONS

Network Line Interface (E1 Interface)

Line Rate	2.048 Mbps ± 50 ppm	Framing	ITU G.704
Line Code	AMI / HDB3 (selectable)	Input Signal	ITU G.703 to -26dB
Output Signal	ITU G.703	Connector	BNC / RJ48C (specify on order)
Jitter	ITU G.823	Electrical	75Ω Coax / 120Ω twisted pair

Customer Equipment Interface

■ *E1 Drop and Insert Port (optional)*

Line Rate	2.048 Mbps ± 50 ppm	Framing	ITU G.704
Line Code	AMI / HDB3 (selectable)	Input Signal	ITU G.703 to -10dB
Output Signal	ITU G.703	Connector	BNC / RJ48C(specify on order)
Jitter	ITU G.823	Electrical	75Ω Coax / 120Ω twisted pair

■ *DTE Data Port*

Number of Ports	2 + 2 (optional) ports	Data Rate	56 or 64 Kbps ∗ n (n = 1 - 31)
Connector	EIA530 (DB25P), DB25P to V.35, RS449, or X.21 conversion cable (optional)		

■ *DS0 Mapping*

Maps	Two switchable sets of DS0 maps for DTE and D&I ports
Remote Sending	Sending active DS0 maps to a remote site

Performance Monitor

Performance Store	Last 24 hours performance in 15 minutes intervals and last 7 days in 24-hour summary line, user, D&I port, and remote site
Performance Reports	Date & Time, Errored Second, Degraded Minutes, Unavailable Second, Bursty Errored Second, Severe Errored Second, and Controlled Slip Second. Also available in Statistics (%)
Alarm History	Date & Time, Alarm Type (i.e. Master Clock Loss, RAI, AIS, LOS, BPV, ES, CS), and Location (i.e. line, DTE)
Alarm Queue	Maximum 40 alarm records which record the latest alarm type, location, and date & time
Threshold	Bursty Seconds, Severely Errored Second, Degraded Minutes

System Configuration Parameters

Active Configuration, Stored Configuration, and Default Configuration (Stored in Non-volatile Memory)

Diagnostics Test

Loopback	Line Loopback, Payload Loopback, Local Loopback, and DTE Loopback
Test Pattern	20 bits QRSS, 3-in-24, 1-in-8, 2-in-8, 1:1 patterns
Idle Channel	Use of idle channel to perform PRBS diagnostic test
Remote Loopback	Line Loopback, Payload Loopback, and DTE Channel Loopback (V.54 or Loop proprietary)

Front Panel and Console Port

Console Port	RS232 with VT100 terminal mode. Embedded SNMP (optional)
LCD/LED	2 lines by 40 characters LCD display, 9 status LEDs (Power, Line, D&I, DTEn, RLB, and ACO)
Keypad	4 operation keys and ACO key
Bantam Jack	6 bantam jacks for Line and D&I port break and insert

Alarm Relay

Alarm Relay	Fuse alarm and performance alarm
Activation	RAI, AIS, LOS, LOF, BPV, ES, UAS, CS of line and D&I port, and DTE port alarm

Physical/ Electrical

Dimensions	430 x 43.7 x 306.5 mm (WxHxD)	Humidity	0-95% RH (non-condensing)
Power	-48V 450mA DC, 100-240V AC	Mounting	Desk-top stackable, 19/23 inch rack mountable
Temperature	0-50°C	Weight	7.7 lb., (3.5 kg)

Compliance

ETSI	ETS 300420, ETS 300419 ITU	G.703, G.704, G.706, G.732, G.736, G.823	
Pan European	CTR 12/13, CE 168X	EMI/EMC	EN50082-1 EN55022 Class A
BABT	NTR4	Safety	EN41003

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Version 12 11 JUL 2008 Subject to change without notice