FE1 CSU/DSU

LOOP-E™1510
FE1 CSU/DSU SERIES
STAND ALONE

Description

Loop Telecom's Loop-E1510 FE1 CSU/DSU product series provide an economic solution to E1 network access cost, when only a partial of 31 DS0 channels is needed. Clear channel (32 DS0 channels) is also available. This product series support HDB3 (High Density Bipolar 3) coding and provide continuous error checking, and in-service diagnostics. Customer equipment interface include serial DTE. With DTE port operating from 64 Kbps to 2048 Kbps, Loop-E1510 FE1 CSU/DSU allows users to interconnect LANs and WANs, CAD and CAM, video conference, mainframe hosts, and others.

Loop-E1510 also supports framed/unframed E1-to-Ethernet Bridge, and provides an economic solution to E1 network access. The E1-to-Ethernet Bridge supports fractional or clear channel E1 WAN port with HDB3 (High Density Bipolar 3) coding and continuous error checking, and single 10/100 Ethernet LAN port with bridging function.

Loop-E1510 FE1 CSU/DSU series support local control and diagnostics. This allows users to execute in-service diagnostics and fault isolation. Ten LEDs on the front panel provide both line side and DTE side status indicators.

FEATURES

- DSU functionality integrated with a CSU in a compact package.
- DTE interface: V.35, X.21, and Bridge
- Connection to LAN/WAN, CAD/CAM, or Hosts to E1 Network Services.
- Support VLAN frames and extended frame size of 1532 bytes without CRC for Bridge interface.

CERTIFIED ISO-9001

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)	Description
Loop-E1510-S-DTE-ww-pp	Loop-E1510-S-DTE-ww-pp-**G**	Base Unit
Accessories		
User's Manual (All User's Manuals are RoHS compliant)		
Loop-E1510-S-UM	Loop-E1510-S-UM	User's Manual (paper, hard copy-optional). A CD version of the manual is already included as standard equipment.
Tray		
81.TRAY19.000	81.TRAY19.000-**G**	19" Tray (One tray for two base units)
Power Cord (All power cords are RoHS compliant)		
Loop-ACC-PC-USA	Loop-ACC-PC-USA	AC power cord for Taiwan/USA
Loop-ACC-PC-EU	Loop-ACC-PC-EU	AC power cord for Europe
Loop-ACC-PC-UK	Loop-ACC-PC-UK	AC power cord for the UK
Loop-ACC-PC-AUS	Loop-ACC-PC-AUS	AC power cord for Australia
Loop-ACC-PC-CH	Loop-ACC-PC-CH	AC power cord for China

Where

DTE = 11 for V.35 DTE interface with M34 connector
44 for X.21 DTE interface
BRF for E1 Framed interface with Bridge interface
BRU for E1 Unframed interface with Bridge interface

ww = 75 for 75 ohm BNC E1 interface
120 for 120 ohm Twisted Pair RJ48C E1 interface

pp = AC for 100-240, 50/ 60 Hz Vac (For AC choose an appropriate power cord)
SD24 for single DC supply (24 Vdc)
SD48 for single DC supply (48 Vdc)

Example:
Loop-E1510-S-11-75-AC=
V.35 DTE interface with M34 connector, 75 ohm BNC.
Power is AC.

LOOP-E1510 FE1 CSU/DSU SERIES PRODUCT SPECIFICATION (Stand Alone)

Network Line Interface (E1 Interface)

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

DTE Interface (V.35, X.21)

Data Port	Single DTE
Data Rate	n * 64 Kbps (n = 1 - 32)
Connector	M34 for V.35 interface, DB15 for X.21 interface

Clear Channel (Unframed)

Data Rate	2048 Kbps (32 * 64Kbps)

Diagnostics Test

Loopbacks	Line Loopback and DTE Loopback

Bridge Interface

Data Port	Single Ethernet
Physical Interface	802.3 10BaseT, 802.3u 100BaseTX
Connector	RJ45

- Bridge function
- Auto-negotiation
- VLAN frames and extended frame size of 1532 bytes without CRC for Bridge interface are supported

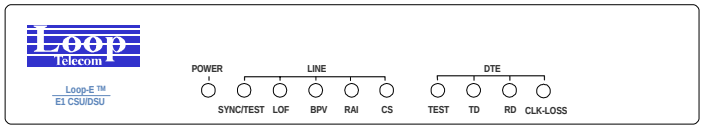
Distance

The distances E1 signal can reach depend on the wire gauge and environmental factors such as temperature and external interference. Typical measured distances of Loop-E1510 are shown in table below:

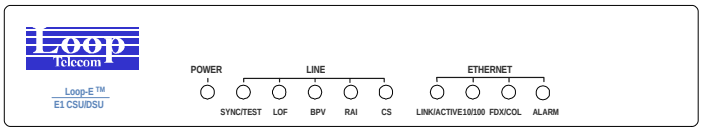
Wire Gauge	Diameter (mm)	Distance (Km)
19	0.9	2.3
22	0.6	1.7
24	0.5	1.4
26	0.4	1.0

Front Panel

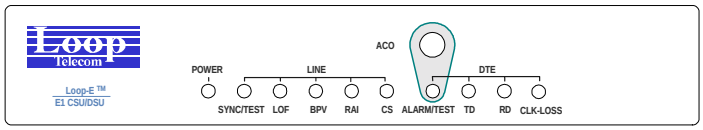
Multi-color LED indicators



E1510 with V.35 Interface



E1510 with Bridge Interface



E1510 with X.21 Interface

Physical/Electrical

Dimensions	210 x 41.5 x 140 mm (WxHxD)
Power	100-240Vac, 24Vdc, 48Vdc
Temperature	0 -50°C
Humidity	0-95% RH (NON-CONDENSING)
Mounting	Desk-top stackable

Compliance

ETSI	ETS 300420, ETS 300419
ITU	G.703, G.704, G.706, G.732, G.736, G.823
EMI/EMC	EN50081-1, EN55022 Class A, EN55024
Safety	EN60950: 2000

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