Features:

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

Description:

Loop Telecom’s Loop-E1510 E1 CSU/DSU with V.35, X.21, Ethernet, or E1 product series provide an economic solution to E1 network access. Loop-E1510 with V.35, X.21, or Ethernet offers a partial of 31 DS0 channels and clear channel (32 DS0 channels) Loop-E1510 E1 repeater can only work with clear channel. This product series support HDB3 (High Density Bipolar 3) coding and diagnostics.

With V.35 or X.21 port operating from 64 Kbps to 2048 Kbps, Loop-E1510 allows users to interconnect LANs and WANs, CAD and CAM, video conference, mainframe hosts, and others.

Loop-E1510 E1 repeater provides E1 interface to extend the reach of the network up to 1Km.

Loop-E1510 also supports Ethernet Bridge with fractional or clear channel E1 WAN port and single 10/100 Ethernet LAN port with bridging function.

Loop-E1510 E1 CSU/DSU series support local control and diagnostics. This allows users to execute diagnostics. LEDs on the front panel provide both line side and DTE side status indicators.
**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.

<table>
<thead>
<tr>
<th>Model (non RoHS compliant)</th>
<th>Model (RoHS compliant)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loop-E1510-S-port-ww-pp</td>
<td>Loop-E1510-S-port-ww-pp-G</td>
<td>Base Unit</td>
</tr>
</tbody>
</table>

**Accessories**

**User's Manual (All User's Manuals are RoHS compliant)**


**Tray**

| 81.TRAY19.000 | 81.TRAY19.000-G | 19” Tray (One tray for two base units) |

**Power Cord (All power cords are RoHS compliant)**

<table>
<thead>
<tr>
<th>Loop-ACC-PC-USA</th>
<th>Loop-ACC-PC-USA</th>
<th>AC power cord for Taiwan/USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loop-ACC-PC-EU</td>
<td>Loop-ACC-PC-EU</td>
<td>AC power cord for Europe</td>
</tr>
<tr>
<td>Loop-ACC-PC-UK</td>
<td>Loop-ACC-PC-UK</td>
<td>AC power cord for the UK</td>
</tr>
<tr>
<td>Loop-ACC-PC-AUS</td>
<td>Loop-ACC-PC-AUS</td>
<td>AC power cord for Australia</td>
</tr>
<tr>
<td>Loop-ACC-PC-CH</td>
<td>Loop-ACC-PC-CH</td>
<td>AC power cord for China</td>
</tr>
</tbody>
</table>

Where

- port =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
- E1 for E1 interface
- ww =75 for 75 ohm BNC E1 network interface
- 120 for 120 ohm Twisted Pair RJ48C E1 network interface
- pp =AC for 100-240, 50/60 Hz Vac (For AC choose an appropriate power cord)
- SD24 for single DC power supply (-24Vdc: -18 to -36 Vdc) E1 repeater exclusive
- SD48 for single DC power supply (-48Vdc: -36 to -72 Vdc) E1 repeater exclusive
- DC for 20 to 60 Vdc power source (Only for E1 repeater)

Example:

- Loop-E1510-S-11-75-AC=
  - V.35 DTE interface with M34 connector, 75 ohm BNC E1 network interface with AC power.

- Loop-E1510-S-E1-75-SD48=
  - E1 interface, 75 ohm BNC E1 network interface with single DC (-48Vdc) power supply.

**LOOP-E1510 E1 CSU/DSU SERIES PRODUCT SPECIFICATION (Stand Alone)**

**Network Line Interface (E1)**

- Line Rate: 2.048 Mbps ± 50 ppm
- Line Code: HDB3
- Input Signal: ITU G.703
- Output Signal: ITU G.703
- Jitter: ITU G.823
- Connector: BNC/RJ48C (field selectable by jumpers)

**DTE (V.35, X.21) Interface**

- Data Port: Single DTE
- Data Rate: \( n \times 64 \text{ Kbps} \) (\( n = 1 - 32 \))
- Connector: M34 for V.35 interface, DB15 for X.21 interface
**DTE (Ethernet) Interface**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Ports</td>
<td>1</td>
</tr>
<tr>
<td>Ethernet function</td>
<td>10/100BaseT, IEEE802.3</td>
</tr>
<tr>
<td>Auto-negotiation</td>
<td>(10/100M)</td>
</tr>
<tr>
<td>Bridge function</td>
<td></td>
</tr>
<tr>
<td>VLAN transparent</td>
<td></td>
</tr>
<tr>
<td>Auto-negotiation (10/100M)</td>
<td></td>
</tr>
<tr>
<td>HDLC encapsulation</td>
<td>without Ethernet FCS</td>
</tr>
<tr>
<td>Connector</td>
<td>RJ45</td>
</tr>
</tbody>
</table>

**DTE (E1) Interface**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Rate</td>
<td>2.048 Mbps ± 50 ppm</td>
</tr>
<tr>
<td>Line Code</td>
<td>HDB3</td>
</tr>
<tr>
<td>Input Signal</td>
<td>ITU G.703 with the receiver sensitivity of –43dB at 1024KHz</td>
</tr>
<tr>
<td>Output Signal</td>
<td>ITU G.703</td>
</tr>
<tr>
<td>Jitter</td>
<td>ITU G.823</td>
</tr>
<tr>
<td>Connector</td>
<td>BNC/RJ48C (field selectable by jumpers)</td>
</tr>
</tbody>
</table>

**Diagnostics Test**

- **Loopbacks:** Line Loopback and DTE Loopback

**Electrical**

- **Power:**
  - AC: 100-240Vac, 50/ 60 Hz
  - DC: 24Vdc 18-36 Vdc
  - 48Vdc: 36-72 Vdc
- **Power consumption:** Max. 5W

**Physical & Environmental**

- **Dimensions:** 210 x 41.5 x 140 mm (WxHxD)
- **Temperature:** 0 - 50°C
- **Humidity:** 0-95% RH (NON-CONDENSING)
- **Mounting:** Desk-top or rack mount with tray

**Standards Compliance:**

- ETSI: ETS 300420, ETS 300419

**Certifications**

- EMI/EMC: EN55022 Class A, FCC 15 Class A, EN55024
- Safety: EN60950-1

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