



Loop-H™3310 G.SHDSL STAND ALONE

Description

The Loop-H3310 provides high speed digital transport over a single copper pair using standard 16PAM or proprietary 32PAM technology. Versatility of this series comes from a choice of digital interfaces and a choice of line rates, with the lower line rates applicable to longer reaches.

Repeaters are available for extending the reach beyond a single span.

This stand-alone version is intended for customer premises installation only. By installing in conjunction with a Loop-H3300 at the central office, Loop-H3310 can provide a high speed data link with DTE interfaces (V.35, X.21).

The Loop-H3310 supports configuration and diagnostics from a local or remote terminal. This allows execution of in-service diagnostics and fault isolation.

Features

- Distances vary by line speeds, wire thickness and environmental factors, depending on max n.
- E1, or V.35, X.21 DTE interfaces.
- Uses industry standard 16PAM or proprietary 32PAM line format.
- Support line power
- Support 1-pair or 2-pair G.shdsl lines
- Software Download Firmware
- Multi-color LED indicators
- As slave to the Loop-H3300 master series



**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-H3310-SC- <i>DTE-SP-PP1</i>	Loop-H3310-SC- <i>DTE-SP-PP1-G</i>	Stand Alone with LCD & LED display
Loop-H3310-SE- <i>DTE-SP-PP1</i>	Loop-H3310-SE- <i>DTE-SP-PP1-G</i>	Stand Alone with LED display only
Loop-H3310-SE- <i>DTE-SP-PP2-ODS</i>	Not available	One Stand Alone with LED display in small outdoor box
Loop-H3310-SE- <i>DTE-SP-PP2-PP3-ODM</i>	Not available	Two Stand Alones with LED display in middle outdoor box
Accessories		
User's Manual (All User's Manuals are RoHS compliant)		
Loop-H3310-S-UM	Loop-H3310-S-UM	User's Manual (paper, hard copy-optional). A CD version of the manual is already included as standard equipment.
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=

	(non RoHS compliant)	(RoHS compliant)	Description
11	Available	Available	V.35 DTE interface with M34 connector
44	Available	Available	X.21 DTE interface
E75	Available	Available	75 ohm BNC E1 interface
E120	Available	Available	120 ohm Twisted Pair RJ48C E1 interface
ERF	Available	Not available	75 ohm RF-coaxial E1 interface

SP=

For E1:

kk for multi-rate 200Kbps – 2056 Kbps (1-pair)

mm for multi-rate 200Kbps – 2056 Kbps (2-pair)

For DTE:

kk for multi-rate 200Kbps – 2.3 Mbps, and 4.6Mbps (1-pair)

mm for multi-rate 200Kbps – 2.3 Mbps, and 4.6Mbps (2-pair)

PP1=

	(non RoHS compliant)	(RoHS compliant)	Description
P1	Available	Available	-48 Vdc
P2	Available	Available	100-240 Vac (For AC choose an appropriate power code)
P4	Available	Not available	DC power from line
P6	Available	Not available	-48 Vdc with sealing current looped
P7	Available	Not available	100-240 Vac with sealing current looped
P8	Available	Not available	-24 Vdc

PP2, PP3=

P1 for -48 Vdc

P4 for DC power from line

ODS for outdoor box in small size

ODM for outdoor box in middle size

LOOP-H3310 G.SHDSL PRODUCT SPECIFICATIONS (STAND ALONE)

E1 Interface

Line Rate	2.048 Mbps $\pm$ 50 PPM	Framing	ITU G.704
Line Code	HDB3	Connector	BNC/RJ48C
Input Signal	ITU G.703	Output Signal	ITU G.703
Compatible with E1 ISDN PRI		Electrical	75 Ω Coax/120 Ω twisted pair

DTE Interface (V.35, X.21)

Data Port	Single DTE
Data Rate	n x 64 Kbps (up to line rate)
Connector	M34 connector for V.35 interface, DB15 for X.21 interface

G.shdsl Line Interface

Line Code	16/32-TCPAM, full duplex with adaptive echo cancellation
Electrical	Unconditioned 19-26 AWG twisted pair
Connector	RJ45
Sealing Current	Max. 20ma sink current
Line Rate available	N x 64K+8, N = 3 to 36
Data Rate available	For 1-loop: 64k to 2304 kbps

For 2-loop: 64k to 2304 kbps **Note:** For two loops (two pairs) the customer can set the line rate (N x 64K+8) at any setting from N=3-36. The maximum data rate will automatically be equal to the line rate x 2. Intermediate data rates between 36 and the maximum data rate are not supported. Eg. If the line rate is set at 35, available data rates are 3-36 and 70.

Maximum Bit Rate	4.6Mbps
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Clock

Source	G.shdsl looped, Internal at $\pm$ 32ppm, or E1/DTE
Mode	Plesiochronous, Synchronous, Hybrid (downstream synchronous, upstream plesiochronous)

Console Port

Connector	DB9S at front panel
Electrical	RS232 interface (DCE)
Protocol	Menu driven VT-100 terminal

System Configuration Parameters (All in non-volatile memory)

Active Configuration	Current working configuration
Default Configuration	Manufacture default configuration

Diagnostics Test

G.shdsl Loopback	To-LINE, To-Line-payload, ITU-T V.54 (manufacture option)
E1 Loopback	To-E1, To-LINE
DTE Loopback	To-DTE, To-Local

Front Panel

Multi-color LED Indicators

Physical/Electrical

Dimensions	210 x 41.5 x 140 mm (WxHxD)
Power	Switched 100-240 Vac, 50/60 Hz., 48Vdc, or 24Vdc
Temperature range	0 – 50 °C
Humidity	0 – 95% RH (non-condensing)
Mounting	Desk-top stackable Rack Mount tray available

OUTDOOR BOX PRODUCT SPECIFICATIONS

Physical

Dimension	For middle box : 400 x 300 x 100 mm (WxHxD) For small box : 300 x 220 x 100 mm (WxHxD)
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Environment

Temperature range	0 – 50 °C
Humidity	0 – 95% RH (non-condensing)

Compliance

Rating	IP-55, IP-67
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Application Illustrations



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ISO 9001/ISO 14001

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