

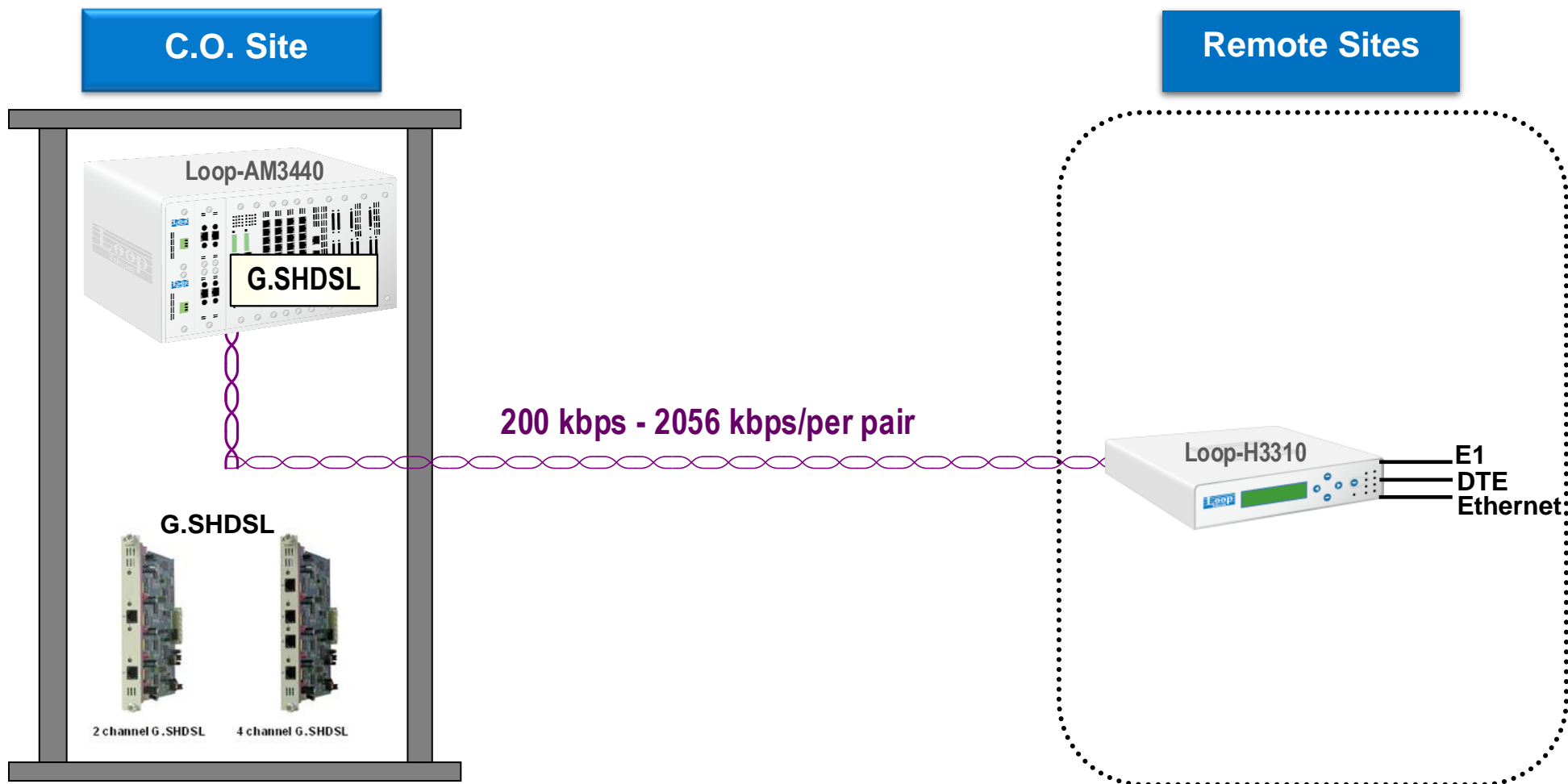
# Loop-H3310 G.SHDSL TDM





# Applications – AM3440 Copper Solution

- Supports software and hardware bridge
- Does not support G.SHDSL.bis



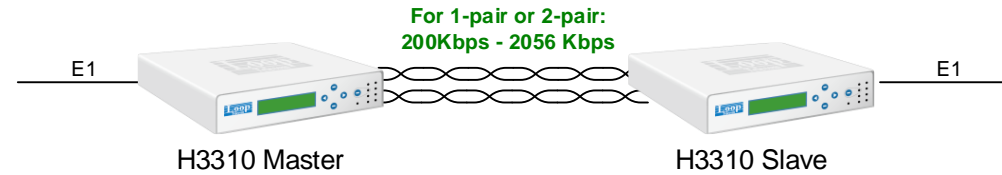


# Applications – H3310 G.SHDSL Solution

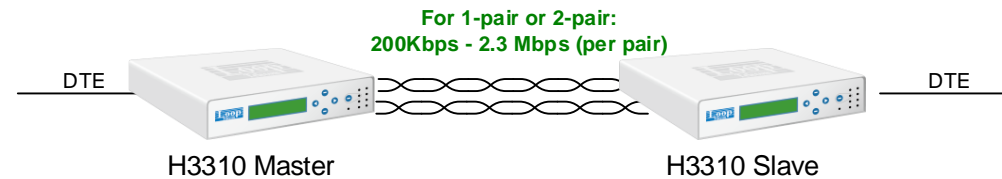
## Data Rate:

- 2.304Mbps (1-pair)
- 4.608Mbps (2-pair)

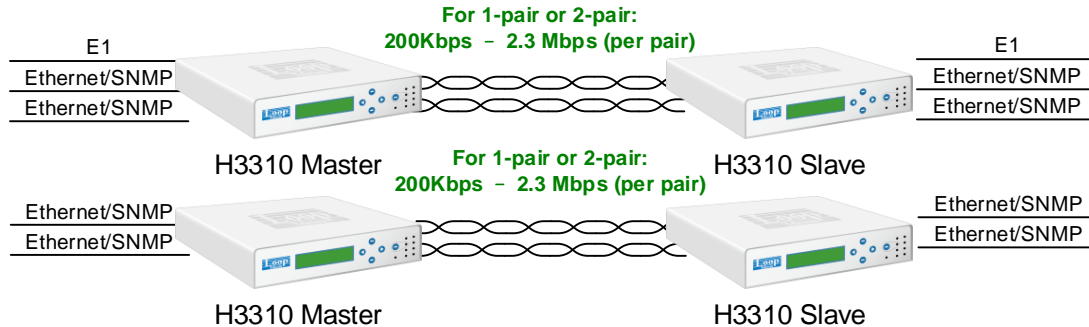
### Single E1 Option



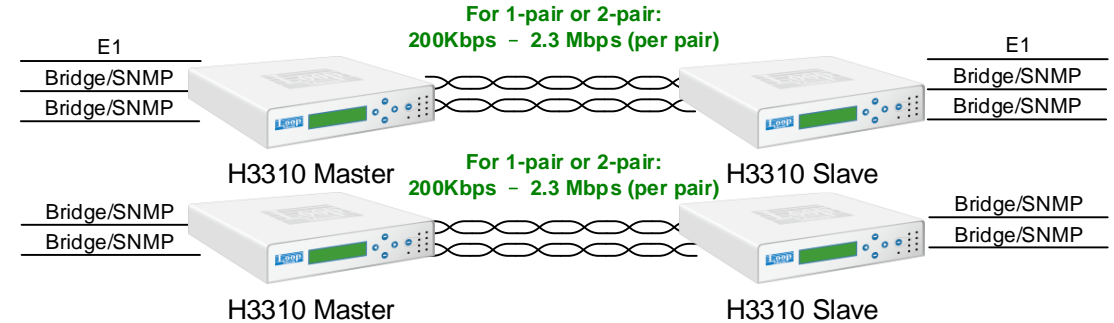
### Single DTE (V.35 or X.21) Option



### Ethernet Option



### Ethernet Hardware Bridge Option



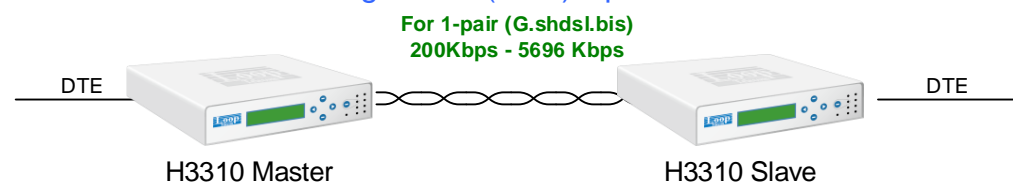


# Applications – H3310 G.SHDSL bis Solution

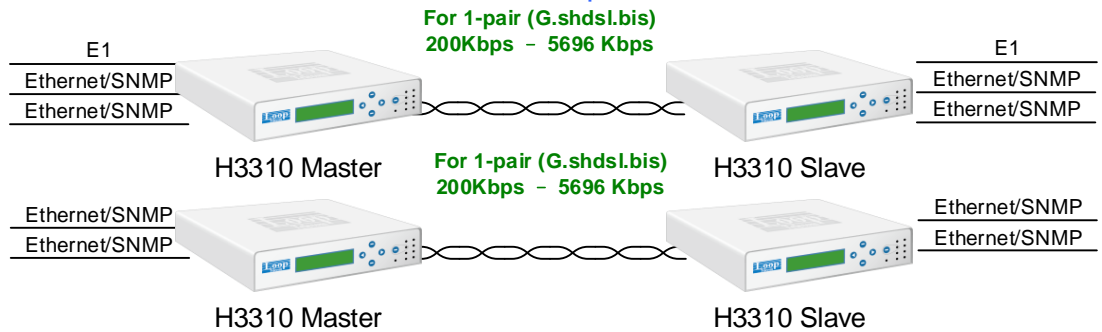
## Data Rate:

- 5.696Mbps (1-pair)
- 11.392Mbps (2-pair)

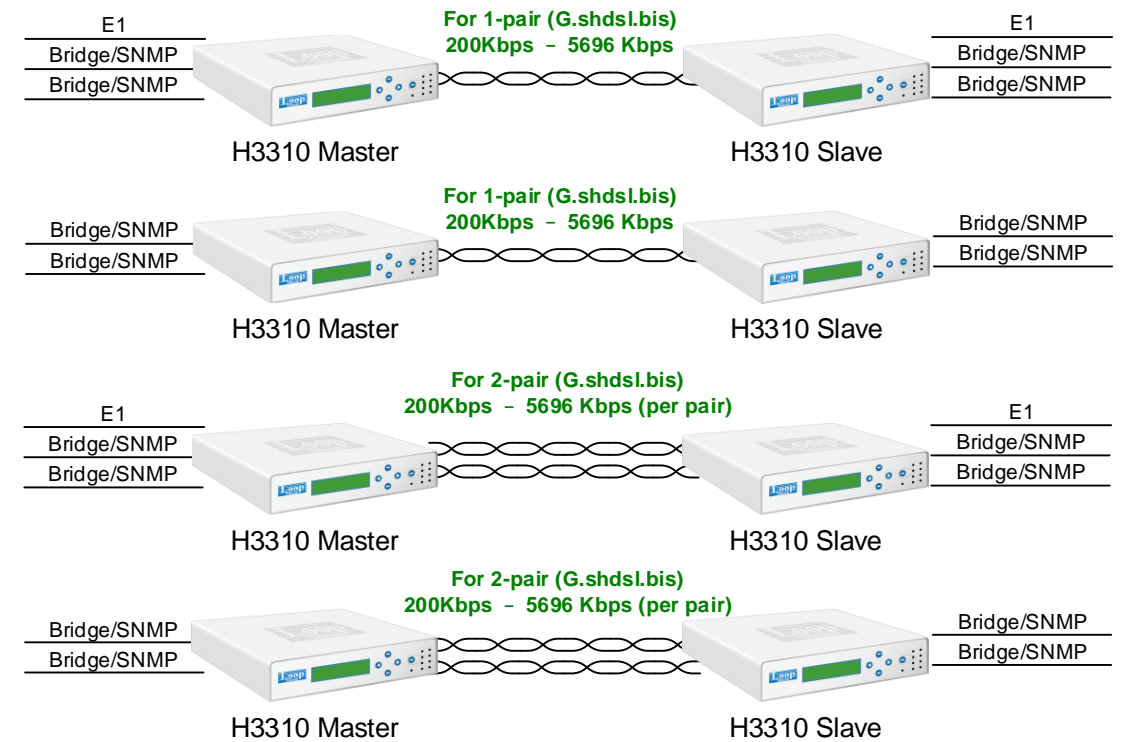
Single DTE (V.35) Option



Ethernet Option



Ethernet Hardware Bridge Option





# Features of Loop-H3310 G.SHDSL

- Point to point application
- WAN port
  - 1-pair/2-pair/1+1 G.SHDSL mode selectable
  - 1 pair G.SHDSL.bis
  - 1-pair/2-pair G.SHDSL.bis with hardware bridge option only
  - STU-C (master) or STU-R (slave) mode selectable
- Tributary port
  - Support up to 1-pair G.SHDSL.bis
    - One E1 port
    - One V.35 DTE port
    - One E1 and Two Ethernet ports (Router/SNMP Mode)
    - One E1 and Two Ethernet ports (Bridge/SNMP Mode)
    - Two Ethernet ports (Bridge/SNMP Mode)
    - Two Ethernet ports (Router/SNMP Mode)
  - Support up to 2-pair G.SHDSL.bis
    - One E1 and Two Ethernet ports (hardware Bridge/SNMP Mode) with QoS function
    - Two Ethernet ports (hardware Bridge/SNMP Mode) with QoS function



# Features of Loop-H3310 G.SHDSL (Continued)

- Power:
  - Fixed AC (100 to 240 Vac)
  - Fixed DC (-48 Vdc, -42 to -72 Vdc)
  - Fixed AC or DC (100 to 240 Vac; -48 Vdc (-42 to -72 Vdc))
- Local and remote firmware download
- Local configuration upload/download
- Multi-color LED indicators
- Local/remote management through console port, LAN, or WAN
- Management port and interface
  - LCD and keypad (optional)
  - Console port with VT-100 menu
  - SNMP
  - Embedded SNMP
  - Telnet
- Standard compliance
  - ITU-T G.991.2 (G.SHDSL Annex A, B) and G.994.1
  - ITU-T G.991.2 (G.SHDSL.bis Annex F) and G.994.1





# Comparison between Software Bridge and Hardware Bridge

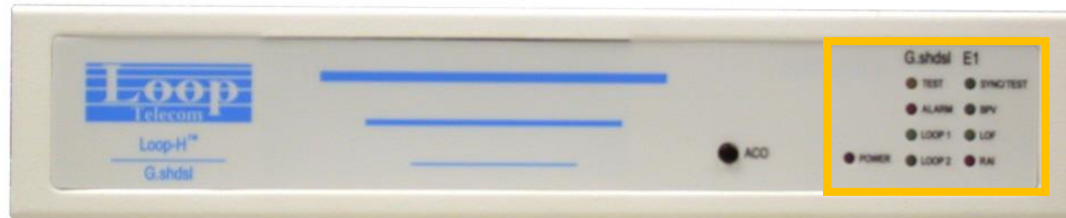
	H3310 Software Bridge	H3310 Hardware Bridge
G.SHDSL	✓	✓
TDM/ATM/EFM	TDM only	TDM only
G.SHDSL.bis(1 pair)	Loop1, Loop2	Loop1, Loop2
G.SHDSL.bis(2 pair)	1+1	Two loops, 1+1
Vlan IEEE802.1q	1-4094	1-16
QOS	X	WRR(port base)
Q in Q	X	✓
Rate Limit	X	✓ (N*64)(N=1-1600)
STP/RSTP	Lan1 and Lan2 bundling	Lan1 and Lan2 isolation
Packets Loss Rate =0	Packet sizes > 512 bytes	Packet sizes > 64 bytes
Mac Learning	2K	2K
Jumbo Frame	1784 bytes	1784 bytes
Flow Control	X	✓
RT Module	✓	X
DHCP	✓	X
NAT	✓	X



# Front Panel Options



With LCD Display  
With LED Indicator



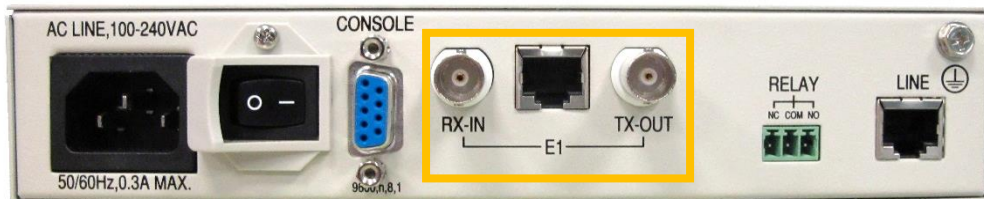
With LED Indicator



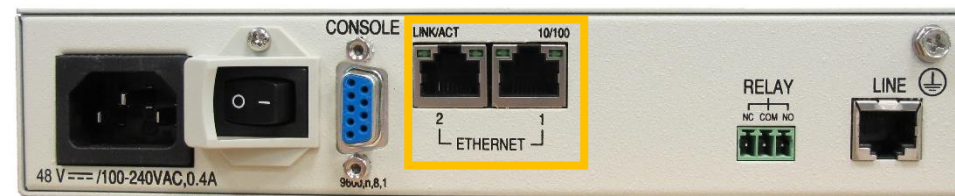


# Rear Panel Options

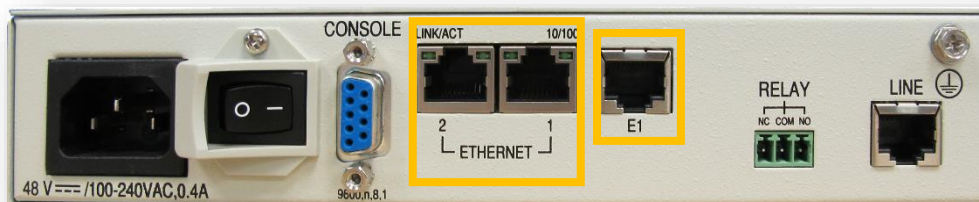
## H3310-E1



## H3310-2Ethernet



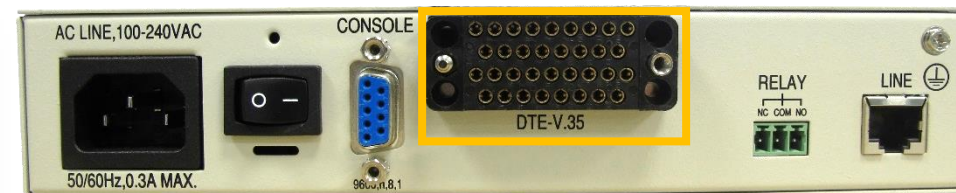
## H3310-2Ethernet H3310-E1+2Ethernet



## H3310-DTE (X.21)



## H3310-DTE (V.35)





# Power Options



Single DC Power

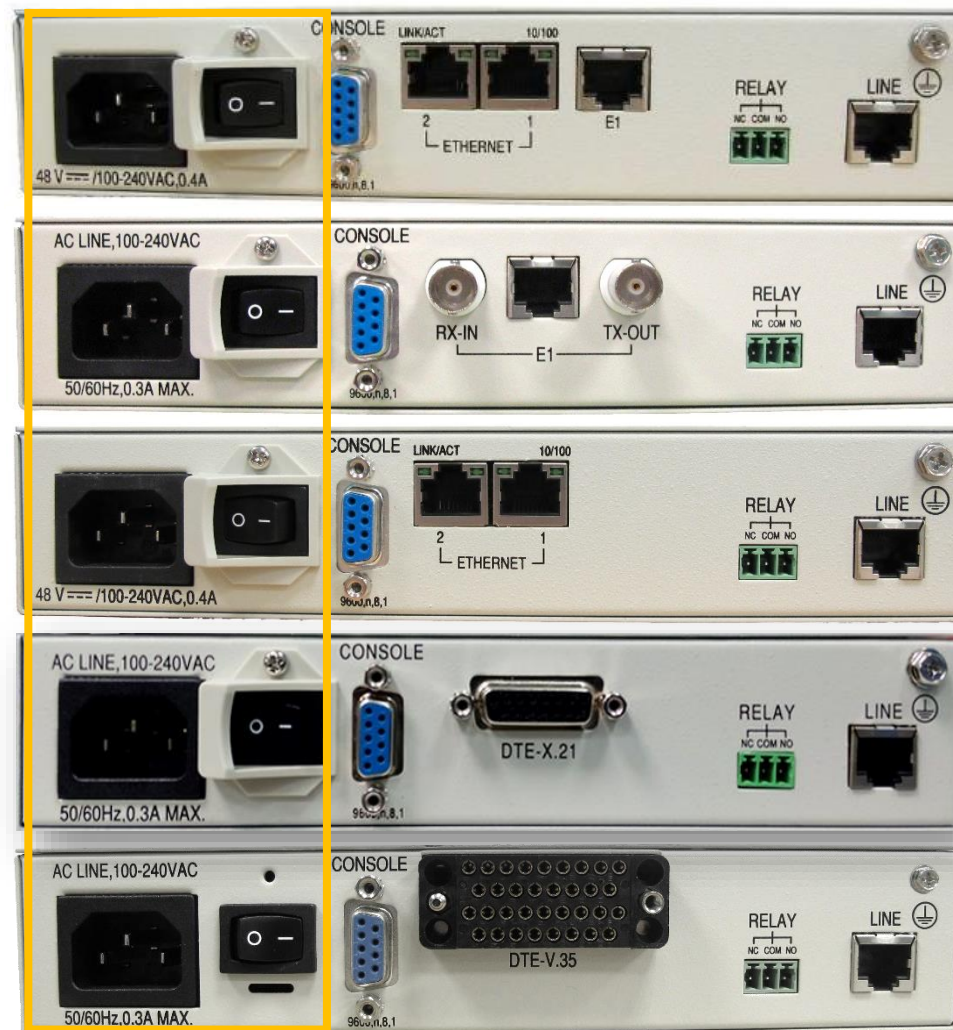
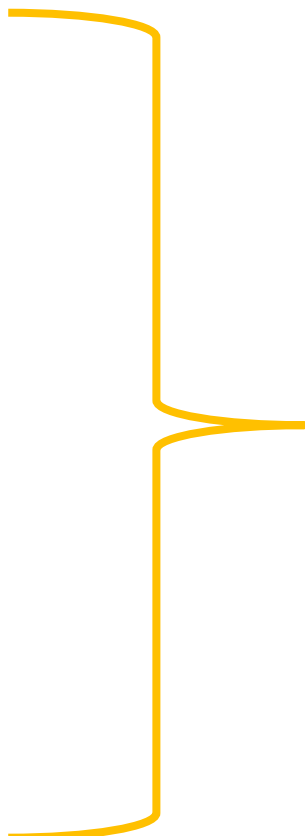


Single AC Power



Single AC or DC Power

(Includes an IEC socket for DC)





# Ordering Example

Loop-H3310- **SC** - **dte** - sp - pp1 - **G**  
Loop-H3310- **SE** - **dte** - sp - pp1 - **G**

SC = LCD and LED displays  
SE = LED display only

<b>11</b>	V.35 DTE interface with M34 connector
<b>E75</b>	75 ohm BNC E1 interface
<b>E120</b>	120 ohm Twisted Pair RJ48C E1 interface
<b>ERJ2BR</b>	1 E1(RJ48C), 2 Ethernet ports support bridge and SNMP functions
<b>ERJ2RT</b>	1 E1(RJ48C), 2 Ethernet ports support router and SNMP functions
<b>2BR</b>	2 Ethernet ports support bridge and SNMP functions
<b>2RT</b>	2 Ethernet ports support router and SNMP functions



# Ordering Example (Continued)

Loop-H3310- SC – dte - **sp** - **pp1** - **G**  
Loop-H3310- SE – dte - **sp** - **pp1** - **G**

<b>kk</b>	For 1-pair line rate Nx64K bps (G.SHDSL Annex A, B. N=3 to 36)
<b>mm</b>	For 2-pair line rate Nx64K bps (G.SHDSL Annex A, B. N=3 to 36)
<b>kb</b>	For 1-pair line rate Nx64K bps (G.SHDSL.bis Annex F. N=3 to 89)

<b>P2</b>	100 to 240 Vac
<b>P7</b>	100 to 240 Vac with sealing current looped
<b>DC</b>	Fixed DC -48Vdc (-42 to -72 Vdc)
<b>AoD</b>	Powered by AC 100 to 240 Vac or DC -48Vdc (-42 to -72 Vdc), but not both simultaneously. Support sealing current looped



# THANK YOU!

## Migrating Legacy Networks to the Future

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For more information, please visit [www.looptelecom.com](http://www.looptelecom.com) or contact us.

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