



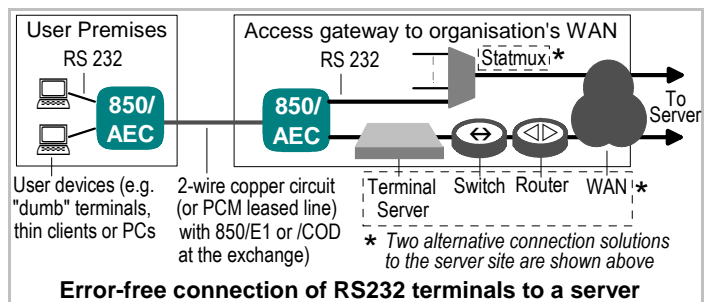
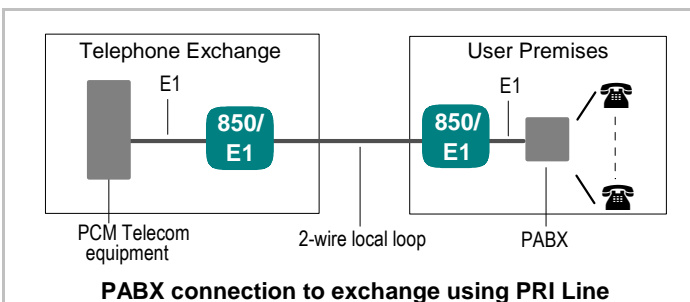
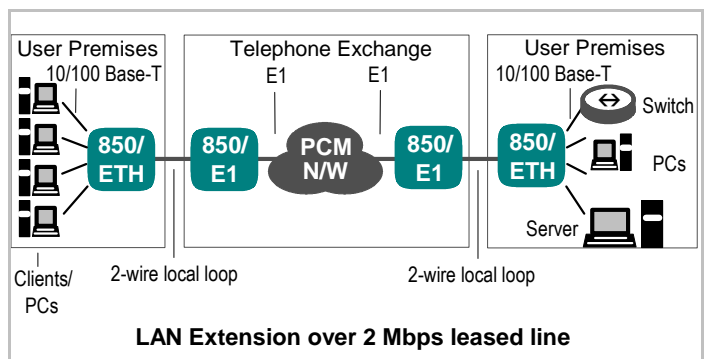
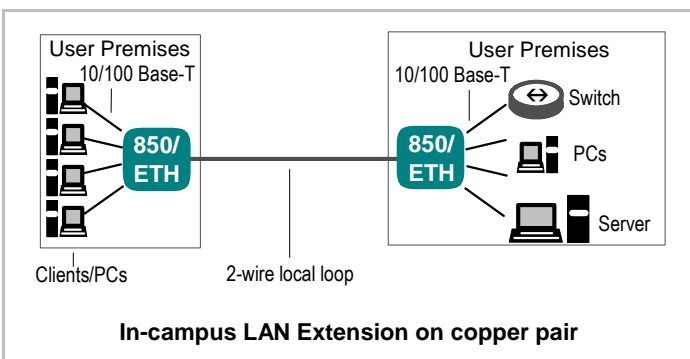
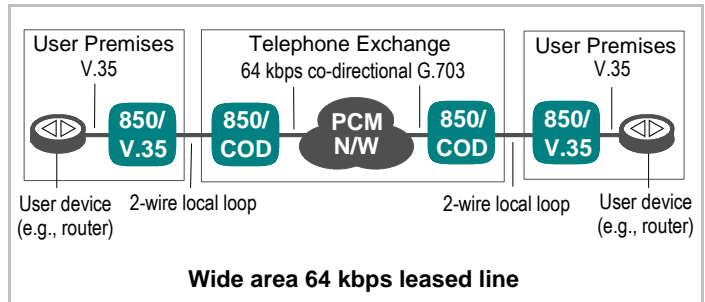
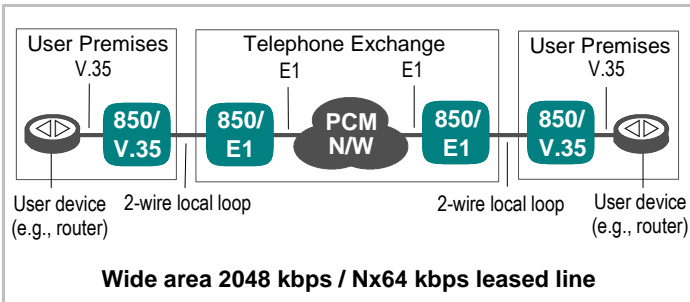
CYGNUS 850

2-wire G.SHDSL Modem

FEATURES

- Operates on 2-wire copper circuits using G.SHDSL
- Driving range: 11 km at 64 kbps and 6.5 km at 2048 kbps on 24 AWG (0.5 mm dia) unloaded copper pair under error free conditions.
- Product functionality (ordering time options):
 - ◆ 64/128 kbps baseband leased line modem
 - ◆ nx64 kbps or 2 Mbps baseband leased line modem
 - ◆ 4-port 10/100 Mbps LAN Extender usable on local copper pair or over wide area PCM leased circuit
 - ◆ 2-port error corrector-cum-64kbps/2 Mbps (framed, single slot selected for 64 kbps) leased line modem for RS 232 devices
- Configuration/monitoring - ordering time options for:
 - ◆ RS 232 compatible console port
 - ◆ LCD-keypad
 - ◆ Via SNMP and Telnet over a TCP/IP network
 - ◆ Through switches and jumpers alone (64/128 kbps models only)
- Flexible clocking options.
- Loopback and test pattern generation facilities for quick fault isolation.
- Front panel indicators for displaying unit status.
- Ordering time option of resettable buzzer for alerting against line failure
- Power supply - ordering time options for 230 VAC, 48 VDC or both

APPLICATIONS



SPECIFICATIONS

G.SHDSL INTERFACE

Compatibility:	G.SHDSL on 2-wire unloaded copper circuit with TC-PAM encoding as per ITU-T G.991.2
Payload speed:	Up to 2048 kbps (up to 2304 kbps for LAN Extenders)
Line Impedance:	135 ohms
Connector:	RJ-45 socket and 2-way terminal block
Protection:	As per ITU-T K.20, K.21

ORDERING TIME OPTIONS FOR DTE INTERFACE

Interfaces available	<ul style="list-style-type: none">E1 (framed and unframed)64/128 kbps V.35nx64 kbps (up to 2 Mbps) V.3564 kbps codirectional G.703V.114-port 10/100 Base-T Ethernet bridge2-port Automatic Error Correcting Module for RS 232 devices
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SPECIFICATIONS OF INDIVIDUAL DTE INTERFACES

E1 interface:	<ul style="list-style-type: none">Speed up to 2048 kbpsSelectable framed or unframed operation; Framed mode selectable from: PCM31 - FAS only, PCM31 - FAS with CRC-4, PCM30 - FAS with CAS, PCM30 - FAS with CAS and CRC-4Connector: 120 ohm - balanced interface provided on RJ-45 socket and/or 4-way terminal block; 75 ohm - unbalanced interface provided on BNC connector
V.35 interface:	<ul style="list-style-type: none">64/128 kbps option: Synchronous operation at 64/128 kbps; nx64 kbps option: synchronous operation at nx64 kbps speed (up to 2048 kbps)Connector: 34 pin block (V.35)
V.11 interface	<ul style="list-style-type: none">64/128 kbps option: Synchronous operation at 64/128 kbps; nx64 kbps option: synchronous operation at nx64 kbps speed (up to 2048 kbps)Connector: 15 pin female
64 kbps COD	<ul style="list-style-type: none">Speed: 64 kbps
G.703 interface:	<ul style="list-style-type: none">Connector: 4-way terminal block and RJ-45 socket
Ethernet Bridge interface:	<ul style="list-style-type: none">No. of ports: 4Compliance: IEEE 802.3 compliant 10/100 Base-T autosensing interfaceConnector for each port: shielded RJ-45 socketFunctionality: Self learning bridge - requires similar unit at other end for bridging
AEC interface:	<ul style="list-style-type: none">No. of ports: 2 user ports + 1 supervisory portCompliance: Asynchronous RS 232 / ITU-T V.24User port format: 50 - 19200 bps; 5,6,7 or 8 data bits; 1, 1.5 or 2 stop bits; Odd, Even or No paritySupervisory port format: 50 - 9600 bps; 8 data bits, 1 stop bit, no parityConnector for each port: RJ-45 socketFunctionality: When used with a similar unit, the module provides automatic error correction for traffic from/to user ports. Module may be monitored and configured from a terminal connected to its supervisory port

CLOCKING MODES

DSL Slaved:	Uses clock recovered from the DSL line signal for sending and receiving data on the DSL link and the DTE interface.
Internal:	Uses an internal crystal controlled clock for sending and receiving data on the DSL link and the DTE interface.
DTE Slaved:	Uses clock received from a V.35 DTE, or clock recovered from the E1 or 64 COD G.703 signal, for sending and receiving data on the DSL link and the DTE interface
DTE Slaved - external transmit	Only on V.35 units. Similar to DTE-slaved mode, except that both transmit and receive clocks are supplied by the DTE.

CONSOLE PORT (ORDERING TIME OPTION)

Compatibility:	ITU-T V.24/RS232
Format:	Asynchronous; 8 data bits, 1 stop bit, no parity - default speed 9600 bps
Connector:	RJ-45 socket

LCD-KEYPAD (ORDERING TIME OPTION)

LCD:	16 characters x 2 lines, with backlight
Keypad:	Four keys (Next, Back, Select and Exit)
Function:	Parameter selection for framed/unframed mode

SUPPORT FOR CENTRALISED NETWORK MANAGEMENT (ORDERING TIME OPTION)

Interface:	10/100 Base-T ethernet on RJ-45 socket
Software functionality:	<ul style="list-style-type: none">SNMP Traps for important eventsTelnet access for configuration and monitoringHTTP compatible web based configuration

DIAGNOSTIC SWITCHES

DTE port local loopback, DTE port digital loop back
Remote loopback request
Test pattern generation and checking

INDICATORS

General indicators:
Unit Power status, Alarm condition, Test status, Default parameter status, LT status, Pattern Error, Serial Management status

DSL line indicators:
DSL link status, Error status

E1 / 64 kbps co-directional G.703 DTE port indicators:
Link status, Error, Receive, Transmit

V.35 port indicators:
DTR status, Receive, Transmit

Ethernet Bridge interface:
LAN Link Status, Speed status, Receive, Transmit

AEC interface:
Link Status, Link Tx, Link Rx, Port Tx, Port Rx, Address Error, Link Error, Remote supervisor, Test status, Default status

GENERAL

Size:	222 mm (w) x 260 mm (d) x 51 mm (h)
Power input:	230 VAC +/-10%, -48 VDC (-40 to -60 VDC), or both: ordering time option
Operating temp:	0°C - 45°C
Humidity:	0-85% RH, non condensing

ORDERING INFORMATION

Order code: CYGNUS 850 S/T/U/V

S: Specifies the speed of the unit.
Use: "L" for 64/128 kbps option • Leave blank for nx64 kbps (up to 2048 kbps)

T: Specifies the DTE interface required.
Use: "E1" for 120 ohm balanced E1 interface • "E1-75" for both 75 ohm unbalanced and 120 ohm balanced E1 interfaces • "V35" for V.35 interface • "COD" for 64 kbps co-directional G.703 interface • "V11" for V.11 interface • "ETH" for 4-port 10/100 Base-T ethernet bridge • "AEC" for AEC interface

U: Specifies the mechanisms provided for configuring the unit
Use: "SW" if the unit is to be configured via switches and jumpers alone • "CON" if the unit is provided with a RS232 compatible console port for configuring and monitoring the unit • "LCD" if unit has a LCD-keypad and console port • "NM" is unit is to be manageable over a TCP/IP network from a central network management station (NMS) and also have console port installed

V: Specifies input power supply option.
Use: "AC" for 230 VAC • "DC" for -48 VDC • "AC&DC" for both 230 VAC and -48 VDC supplies

*Note: Specifications are subject to change without notice
Ref.: 100916*



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