

## BroadBand Access

# XLR 4600 G.SHDSL Voice and Data Modem

### XLR 4600 Overview

The Case Communications eXtreme Line Rate (XLR) 4600 Broadband products use G.SHDSL technology to provide extended E1, LAN and data services at 2.3Mbps over one copper pair, or 4.6Mbps over two copper pairs per unit.

When operating at full rate over one copper pair of wires provides 36 x 64Kbps timeslots, and when operating over 2 copper pairs of wires up to 72 timeslots are available. These are mapped between the three services supported on the Xlr 4600, E1, Serial, LAN Bridging.



### The Key Features of the Xlr 4600

- Up to 36 x 64Kbps (2.304Mbps) over one copper pairs.
- Up to 72 x 64Kbps (4.608Mbps) over two copper pairs.
- Support for N x 64Kbps via an internal Time Division Multiplexer.
- LAN-to-LAN connectivity via Internal Filter Bridge.
- E1 port for framed data (G703/704) or unframed data transport.
- X.21 V.11 serial port for attachment of third party device
- ITU G.922.2 (G.SHDSL) compliant
- Long range over unshielded twisted pairs.
- High-speed symmetrical data services.
- Managed via simple easy to use menu system.

### Management Interface.

A local management interface is presented on an RS 232 9 Way Female 'D' type fixed baud rate interface. Remote configuration is possible provided the DSL link is functional. The Xlr 4600 is managed by a menu system with all commonly used configuration options and status presented to the user.

A second 'Command Line Interface' is also provided for more advanced users. The management port operates at 19,200bps with 8 bits and no parity.

### Control.

The Xlr is able to store a factory default configuration as well as three user configurations, and the unit can be restarted using one of the saved configurations. The Command Line Interface, allows the uploading and downloading of configurations as simple text files.

### Software Upgrades.

Software upgrades are carried out via the local management interface. The management port can be set to a higher data rate, to reduce the time taken to provide software upgrades

### Diagnostics

Local Digital Loopback  
Local G.SHDSL Loopback  
Remote G.SHDSL Loopback  
Remote Digital Loopback

### E1 Interface.

The E1 Interface can be either framed or unframed. For framed signals the channels to transport are selectable except for channel 0, the framing channel. For unframed signals the whole stream can be transported, occupying 32 x 64Kbps channels. The E1 Interface has the following features.

- Physical interface G.703 / 704 balanced 120 Ohm, Rj 45 connector.
- Framed 2Mbps interface for carrying PBX voice traffic (selectable channels)
- Unframed 2Mbps interface for carrying unusual traffic.
- Framed 2Mbps interface for Kilo-Stream aggregate channels (selectable)

### Ethernet Interface.

The built in Ethernet Interface performs Bridging functions to the remote site. It is designed to provide basic destination filtering, and will not pass frames addresses to a local MAC address, across the link, if not necessary. The list of local addresses is determined by examining the local source addresses of the Ethernet Frames.

- 10 Base T interface via an 8 Way RJ 45 Interface Basic Destination Filtering or no Filtering

### Serial Interface.

The Xlr 4600 serial interface allows third party devices to use the XLR, and provides 64Kbps and N x 64Kbps data rates.

- Leased Line Interface – X.21 V.11 DCE via 15 way female 'D' type.
- Options for other interfaces via an adapter cable.

