

**Sigrand SG-16BS**  
**integrated access device G.SHDSL**  
**Ethernet + Serial**

# SG-16BS



**Feature two services through the same line simultaneously** — you need no additional telecommunication equipment and extra wires anymore! It is possible to connect both branch LAN by the main interface (Bridge) and some optional equipment of the branch

**Up to 6 Mbps via 2W line** — this is the only modem allowing so high data rates via 2W line

**Ease of installation** — configuring modem either by DIP switches or by terminal program through RS-232 port

**Reliable operation on noisy lines** — comparing to other modems it has been tested by many customers in real life

**Reach up to 11 km** — this feature allows to connect remote peers through 24 AWG cabling without additional regenerators

**Feature several services through the same line** — optional interface moves the Sigrand SG-16B modems into another class of equipment as integrated access devices

**Optimal data rate** — feature of automatic data rate adjusting, data rate step 64 kbps if configuring by terminal program

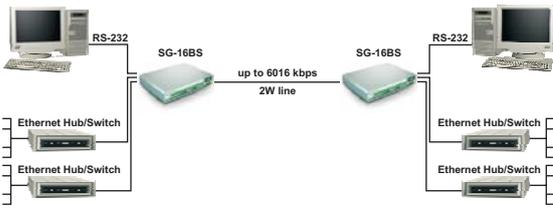
**Compatibility** — it is compatible with equipment of other vendors which complies with "Ethernet-over-DSL" standard

**High reliability** — 5 years of warranty, 100% pre-sale live quality checking

**High service level** — prompt technical support, wide dealer network

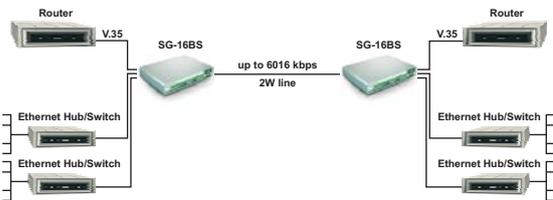
## Examples of SG-16BS applications

Connect LANs via bridges with bandwidth sharing for an optional channel to connect serial-port enabled equipment



LANs enter to one or several VLANs.  
Local traffic is prevented on MAC-level.  
Option to connect through the same channel a router, a terminal, ATM or some other special purpose equipment.

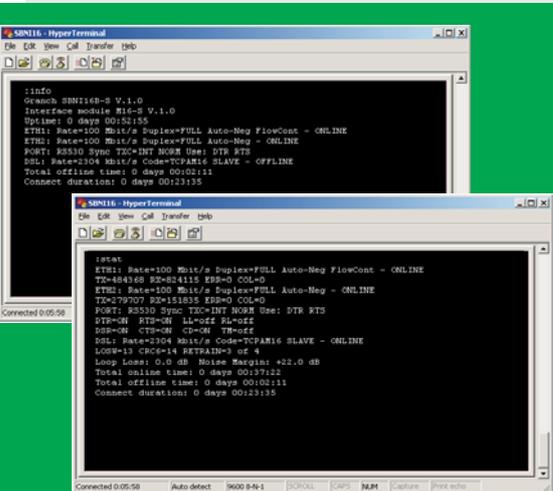
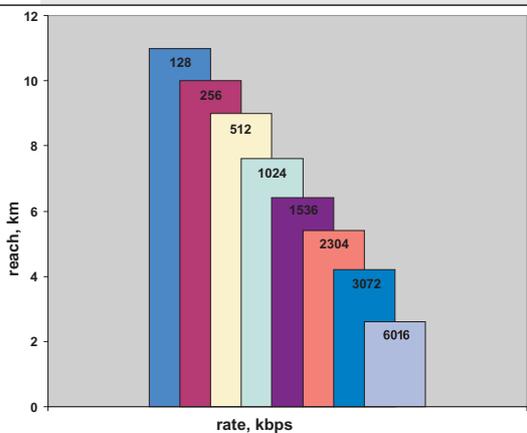
Connect LANs via bridges with optional channel to connect routers



LANs enter to one or several VLANs.  
Local traffic is prevented on MAC-level.  
Option to connect through the same channel to external networks routers, as well as ATM, POS-terminal or other equipment.

**SG-16 modems feature unsurpassed line rate, faster than rivals ever do!**

### Data rate and reach of SG-16 modems



Management software allows define operation modes for each interface, collect statistics for each interface, make use test mode to determine error rate of the line, do configuring of the remote modem. Anyway customer can flexibly share SHDSL channel bandwidth among interfaces in use. Step size is 64 kbps for each interface.

The Sigrand **SG-16BS** modem is the state-of-the-art of G.SHDSL technology. It can connect remote networks together, remote workstations to Ethernet-enabled networks, serial-port enabled equipment (ATMs and POS-terminals). It makes use dedicated 2W copper lines.

The **SG-16BS** is the modem featuring Ethernet Bridge and additional synchronous/asynchronous interface. It also is available as desktop model.

### SG-16BS features:

- Providing of symmetric throughput via one twisted pair in extended data rate range from 64 kbps up to 6016 kbps
- Two system interfaces: Ethernet 10/100Base-T (2 ports) and V.35/RS-530/RS-232 synchronous/asynchronous interface
- G.SHDSL channel bandwidth sharing among the system interfaces
- Built-in Ethernet Bridge with wide set of management and statistics collecting facilities
- Firmware update through the terminal port

**Using of SG-16BS modem is especially attractive if 2 SERVICES SIMULTANEOUSLY is a MUST.**

### Ethernet interface allows:

- Connect remote LANs together
- Connect a remote workstation to the LAN

### Serial system interface allows:

- Connect together serial port enabled equipment (ATMs, POS-terminals)

### SG-16BS interfaces:

G.SHDSL interface to connect with the remote modem via dedicated 2W copper line

G.SHDSL line interface specifications:

Interface type:	G.SHDSL (ITU-T G.991.2)
Link type:	point-to-point
Wire number:	2 (1 pair)
Data rate range:	64-6016 kbps
Automatic data rate adjusting in the range of 192-2304 kbps	
Line coding:	TC-PAM
Transmission type:	full duplex

### 2 Ethernet 10/100BaseT interfaces to connect to LAN

Specification of system and built-in Ethernet Bridge:

- Full Duplex/Half Duplex modes
- Support both direct and cross-over cabling (Auto Crossover, MDI/MDI-X)
- Autonegotiation
- Transparence for all higher level protocols
- Flow Control (802.3x)
- Passing VLAN frames through
- MAC address table capacity: up to 2048
- Packet buffer size: up to 340
- Packet forwarding/filtering rate is 150 000 packets per second

### V.35/RS-530/RS-232 synchronous/asynchronous serial interface:

Connector type:	DB25 (socket)
Supported interfaces:	V.35; RS-530; RS-449/V.36; X.21; RS-232
Data rate in synchronous mode:	64...6016 kbps with 64 kbps step
Data rate in asynchronous mode (RS-232):	300...230400 kbps

Type and settings of the system interface are selected by means of terminal program commands

### RS-232 management terminal port

Management software allows:

- Define operation modes for each interface
- Collect statistics for each interface
- Make use test mode to determine error rate of the line
- Do configuring of the remote modem

### Special and bonus programs

- Marketing support
- Special program for buyers
- Cumulative discounts, gifts
- Upgrade
- Test-drive
- Lottery for modem serial numbers every year