Sigrand SG-16B
modem with Ethernet interface

SG-16B

sigrand

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

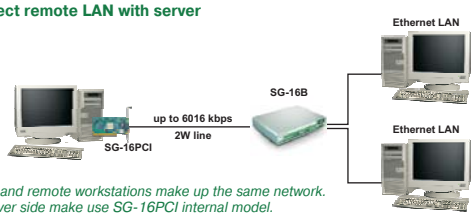
High reliability — 5 years of warranty, 100% pre-sale live quality checking

High service level — prompt technical support, wide dealer network

ООО **«Сигранд»,** Российская Федерация, г. Новосибирск, пр. Лаврентьева, 6. **www.sigrand.ru**
«Sigrand» LLC, Russia, Novosibirsk, 6-th Lavrentiev av. **www.sigrand.com**
☎☎ **+7(383)-332-02-43, 332-94-37, 330-81-66**

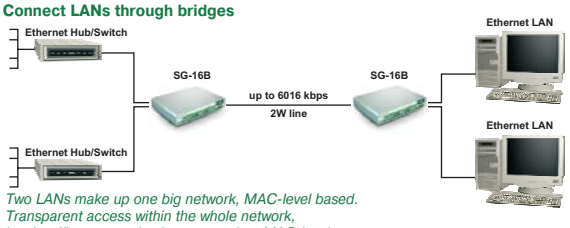
Examples of SG-16B applications

Connect remote LAN with server



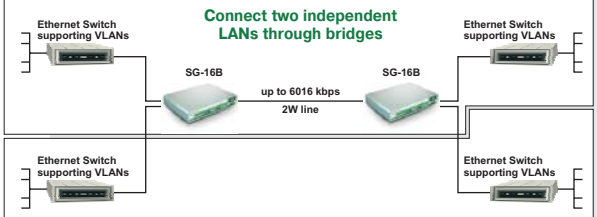
Server and remote workstations make up the same network.
On server side make use SG-16PCI internal model.
Operating systems: FreeBSD, Linux, Windows NT, Windows 2000, Windows XP.

Connect LANs through bridges



Two LANs make up one big network, MAC-level based.
Transparent access within the whole network,
local traffic propagation is prevented on MAC-level.

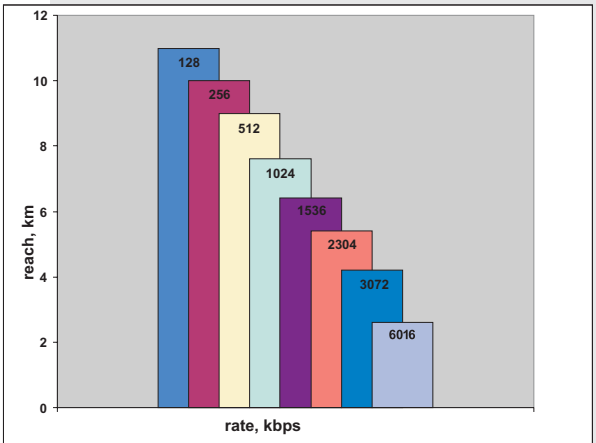
Connect two independent LANs through bridges



Two independent LANs make up one big network, MAC-level based.
Local traffic propagation is prevented on MAC-level.
Bridges supporting VLAN technology provide a way to
prevent interconnection of LAN1 and LAN2

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

Data rate and reach of SG-16 modems



Options of SG-16 modems with Ethernet interface for integrated access devices

You need no additional telecommunication equipment and extra wires anymore!

Optional interface moves the Sigrand SG-16B modems into another class of equipment as integrated access devices.

It is possible to connect both brahcn LAN by the main interface (Brdige) and some optional equipment of the branch.

Feature 2 services through the same copper line:

SG-16BG: Ethernet + E1

SG-16BS: Ethernet+Serial interface V.35/RS-530/RS-232

SG-16BVo/Vs: Ethernet+2 voice channels Voice-over-DSL

The **Sigrand SG-16B** modem is the state-of-the-art of G.SHDSL technology. It can connect remote networks together and remote workstations to Ethernet-enabled networks via dedicated 2W copper lines.

The SG-16B is the modem featuring Ethernet Bridge. It also is available as desktop model

SG-16B features:

Providing of symmetric throughput via one twisted pair in extended data rate range from 64 kbps up to 6016 kbps
Built-in Ethernet Bridge with wide set of management and statistics collecting facilities
Optional second interface provides wide range services of information exchange and converts the modem into an integrated access device
Firmware update through the terminal port

SG-16 interfaces:

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

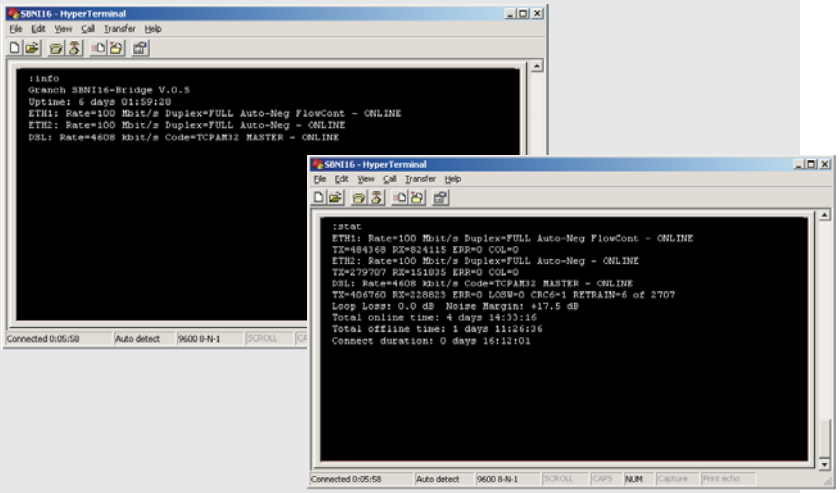
G.SHDSL line interface specifications:
- Interface type: G.SHDSL (ITU-T G.991.2)
- Link type: point-to-point
- Wire number: 2 (1 pair)
- Data rate range: 64-6016 kbps
- Automatic data rate adjusting in the range of 192-2304 kbps
- Line coding: TC-PAM
- Transmission type: full duplex

2 Ethernet 10/100BaseT interfaces to connect to LAN

Specifications of system and built-in Ethernet Bridge:
- FullDuplex/HalfDuplex 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 throughMAC address table capacity: up to 2048
- Packet buffer size: up to 340Packet forwarding/filtering rate is 150 000 packets per second

RS-232 management terminal port

Management software allows:
- Define operation modes for each interface
- Collect statictics 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