Sigrand SG-16BG
integrated accessdevice G.SHDSL
Ethernet + E1

SG-16BG

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

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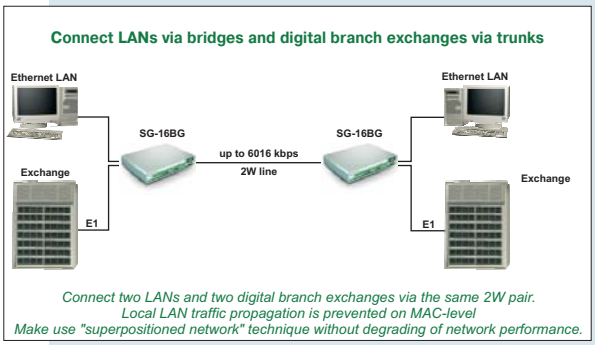
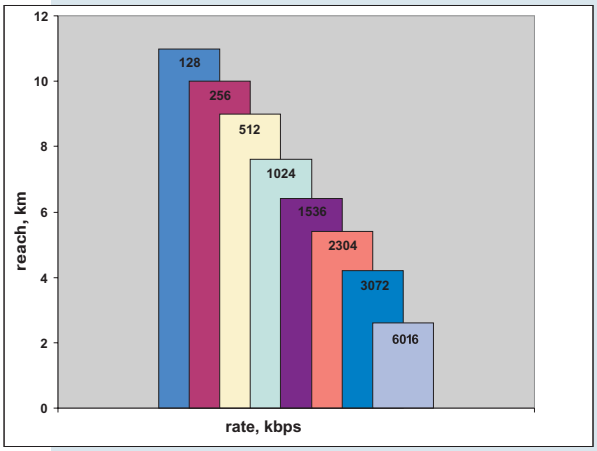
Examples of SG-16BG applications

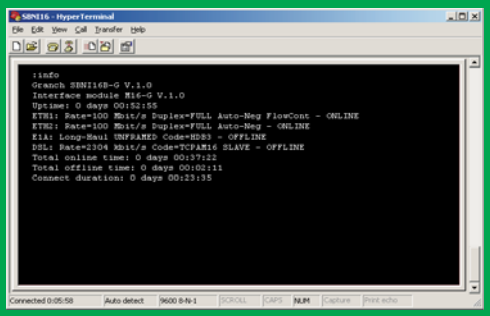


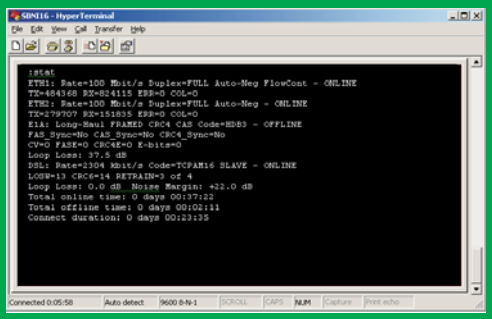
Connect two LANs and two digital branch exchanges via the same 2W pair.
Local LAN traffic propagation is prevented on MAC-level
Make use "superpositioned network" technique without degrading of network performance.

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 statictics 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-16G** modem is the state-of-the-art of G.SHDSL technology. It can connect remote networks together, remote workstations to Ethernet-enabled networks, E1 enabled telecommunication equipment (routers, multiplexors, PBXs).It makes use dedicated 2W copper lines.

The **SG-16BG** is the modem featuring Ethernet Bridge and additional E1/G.703 interface.
It also is available as desktop model.

SG-16BG 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 E1/G.703
G.SHDSL channel badwidth 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-16BG 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

E1 interface allows:

Connect together E1 enabled (G.703/G.704, 2048 kbps) telecommunication equipment (routers, multiplexors, PBXs)

SG-16G 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 LANS

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 through
MAC address table capacity: up to 2048
Packet buffer size: up to 340
Packet forwarding/filtering rate is 150 000 packets per second

System E1 interface

Port quantity:	1
Wire number per communication line:	4 (2 pairs)
Line coding (ITU-T G.703):	HDB3, AMI
Data rate:	Nx64 kbps where N=1...32
E1 interface reach, km/miles:	2.4/1.5 (24 AWG) 1.6/1 (26 AWG)
Framing:	G.704
Superframe types:	CRC4, CAS
Unframed mode:	supported

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