



GRT-402

## 4-wire G.SHDSL Bridge/Router

Based on Digital Subscriber Line (DSL) technology, PLANET's new DSL product, the GRT-402 provides an affordable, flexible, and efficient Internet access solution for SOHO customers, while reducing deployment and operational costs from service providers. Using existing telephone lines, the GRT-402 concentrates all traffic onto a single high-speed trunk for Internet activities or sharing a corporate intranet. Through the simple-yet-powerful management user interface of the GRT-402, networks administrators can complete a managed network deployment just in seconds.

With bandwidth of up to 4.608Mbps, the GRT-402 outperforms both T1's at 1.544 Mbps and E1's at 2.048 Mbps. By using a standard RJ-11 phone wire as a connection medium, the installation and equipment cost of the GRT is dramatically less than that of T1, E1 or Frame Relay. Using integrated bridging and routing support, two GRT-402s can be connected as a LAN-to-LAN network connection at a distance up to 6.7km (4.2 miles) using regular phone wire, eliminating the need for expensive leased line CSU/DSU peripherals and V.35 Cisco routers. Now two offices can be connected for inter-LAN communication using just one telephone pair and two GRT-402's.

### ▶▶ KEY FEATURE

- ❑ Easy configuration and management with password control for various application environments
- ❑ Efficient IP routing and transparent learning bridge to support broadband Internet services
- ❑ NAT/PAT feature lets user both conserve valuable IP address space and reduce IP address management, meanwhile, also protects certain attack from outer network or internal workstations.
- ❑ Fully ATM protocol stack implementation over SHDSL
- ❑ PPPoA and PPPoE support user authentication with PAP/CHAP/MS-CHAP
- ❑ SNMP management with SNMPv1/SNMPv2 agent and MIB II
- ❑ Console and remote (Telnet or HTTP) administration allow user or service providers to locally or remotely diagnose network problems in detail

▶▶ SPECIFICATION

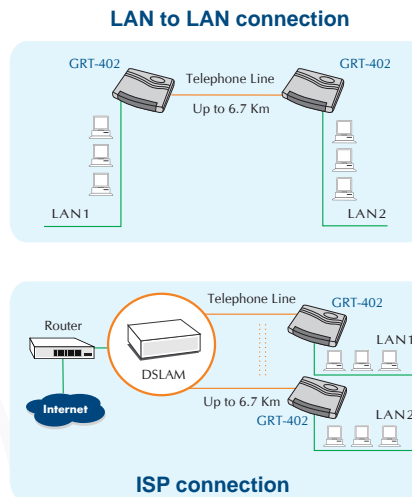
Product		4 wire G.SHDSL Bridge / Router	
Model		GRT-402	
Hardware			
WAN	Interface	RJ-11	
	SHDSL	ITU-T G.991.2 (Annex A, Annex B)	
	Encoding Scheme	16-TCPAM	
	Data Rate	N x 128Kbps (N=0~36)	
	Impedance	135ohms	
	LAN	Interface	4 x RJ-45
		Ethernet	10Base-T, 100Base-TX
Data Rate		10/100Mbps, Full/Half-Duplex	
Console port		RS-232	
LED Indicator	General	PWR	
	WAN	LNK, ACT	
	LAN	LNK/ACT, ALM	
Routing		IP Routing Static Routing and RIPv1/RIPv2 IP masquerading NAT DHCP server DNS relay and caching	
Bridging		IEEE 802.1D transparent learning bridge	
Configuration		Local console (RS-232), Telnet, Web (HTTP), Password control	
Network management		SNMPv1 / SNMPv2 agent MIB II	
ATM		Up to 8 PVCs UBR/CBR traffic shaping AAL5 OAM F5 loopback ATM Forum UNI 4.0	
AAL5		VC multiplexing and SNAP/LLC	
Encapsulation		Ethernet over ATM (RFC 2684/1483) PPP over ATM (RFC 2364) Classical IP over ATM (RFC 1577)	
PPP		PPP over Ethernet (RFC 2516) PPP over ATM (RFC 2364) User authentication with PAP/CHAP/MS-CHAP	
Physical/Electrical		Dimensions (WxDxH) 187 x 145 x 33 mm Power 9V DC, 1.0A Power consumption 9 watts / 30.6 BTU Operating Temp. 0 ~ 45 degree C Storage Temp. -20 ~ 70 degree C Operating Humidity 0 ~ 95 degree C (non-condensing) Storage Humidity 0 ~ 95 degree C (non-condensing)	
EMC/EMI		FCC, CE	

▶▶ APPLICATION

- ❑ **Ethernet Distance extension**

The GRT-402 is excellent for Ethernet distance extension over existing telephone wires. With just one pair of AWG-26 copper wire, you can easily connect two Ethernet networks far away (maximum 6.7 kilometers/4.2 miles) with a maximum 4.6Mbps (at maximum 3.3km/2.1 miles) full duplex transfer rate.
- ❑ **ISP Solution**

G.SHDSL is the best solution to quickly provide cost-effective, high speed network service to Enterprise and SME users or SOHO users which need high-speed symmetrical Internet connections. By utilizing the existing telephony infrastructure, network installation is simple and straightforward. With up to 4.6Mbps full duplex speed IP telephony, website hosting and various broadband services can be easily provisioned.



▶▶ ORDERING INFORMATION

- ▶ **GRT-402** 4-wire G.SHDSL Bridge /Router (1x RJ-11, 4 x RJ-45)