

4-Wire G.SHDSL.bis Firewall Router



The Planet new SHDSL family member GRT-504 is the G.SHDSL.bis router that complies with ITU-T G.991.2 standard and provides affordable, flexible, efficient Internet access solution for SOHO and Small Medium Business environment. The GRT-504 supports business-class, multi-range from 384 Kbps to 11.4 Mbps (4-wire) symmetric data rates and also can be connected as the LAN-to-LAN network connection at the distance up to 6.7km (4.2 miles) by using existing telephone copper wires.

The Planet GRT-504 possesses high-end Bridging/ Routing capabilities with advanced functions of Firewall, QoS, DMZ, Virtual Server, and VPN pass-through. Besides, the GRT-504 supports IEEE 802.1Q and port-based VLAN over ATM network as Virtual LAN has become more and more important feature in the growing internetworking industry.

With the built-in Simple Network Management Protocol (SNMP) and web-based management, the GRT-504 offers an easy-to-use, platform-independent management and configuration facility. The GRT-504 also provides Command-Line Interface which can be accessed via Telnet and the console port. Therefore, the network administrator can manage the device by proper way.

KEY FEATURES

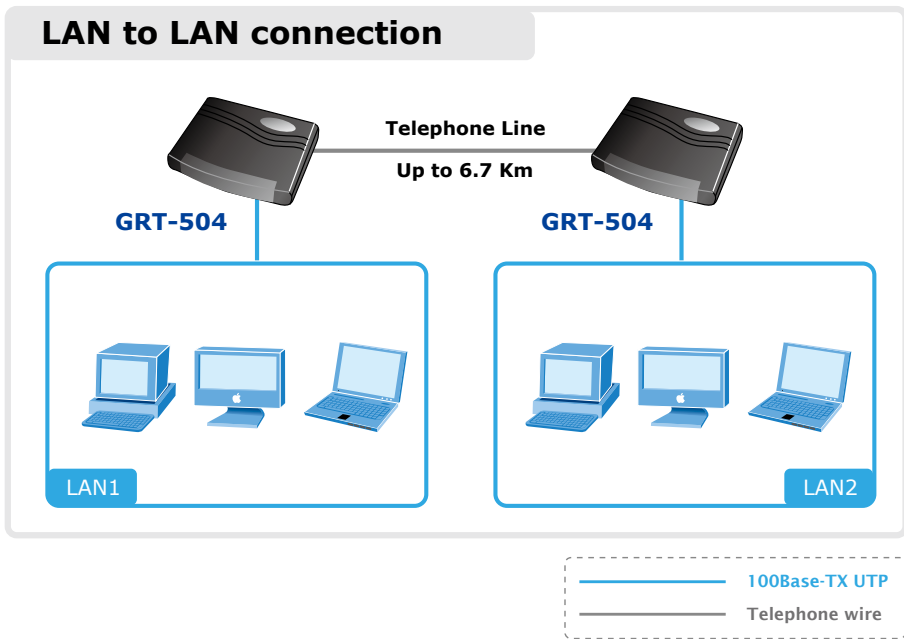
- **High Speed Symmetric Data Transmission:** The GRT-504 supports the latest G.SHDSL.bis technology, provides the higher symmetric data rate up to 11.4 Mbps on 4-wire.
- **CO and CPE side Support:** Provides the back-to-back connection.
- **Firewall:** Supports Natural NAT firewall and Advanced Stateful packet Inspection (SPI) firewall functions.
- **QoS (Quality of Service):** The GRT-504 supports ATM QoS and IP QoS. The ATM QoS includes UBR (Unspecified bit rate), CBR (Constant bit rate), VBR-rt (Variable bit rate real-time), and VBR-nrt (Variable bit rate non-real-time). Also, the traffic classification based on IP, IP range, port, protocol, and precedence.
- **VLAN Support:** Supports the IEEE 802.1Q Tagged and port-based VLAN, offering significant benefit in terms with efficient use of bandwidth, flexibility, performance, and security.
- **Bridge and Router Modes:** Supports two connection modes. Currently, it comes pre-configured with routing mode. Note: routing mode and bridging mode cannot be used simultaneously.
- **Virtual Server:** Allows Internet users to access Internet servers on your LAN. The required setup is quick and easy.
- **VPN Pass through Support:** PCs with VPN (Virtual Private Networking) software using PPTP, L2TP, and IPSec are transparently supported - no configuration is required.
- **DMZ Support:** The GRT-504 can translate public IP address to private IP address to allow unrestricted 2-way communication with Servers or individual users on the Internet. This provides the most flexibility to run programs, which could be incompatible in NAT environment.
- **RIPv1/v2 Routing:** Supports RIPv1/v2 routing protocol for routing capability
- **Simple Network Management Protocol (SNMP):** An easy way to remotely manage the router via SNMPv1/v2
- **Fully ATM protocol stack implementation over G.SHDSL.bis**
- **PPPoA and PPPoE support user authentication with PAP/CHAP/MS-CHAP**

APPLICATIONS

4-Wire G.SHDSL.bis Firewall Router

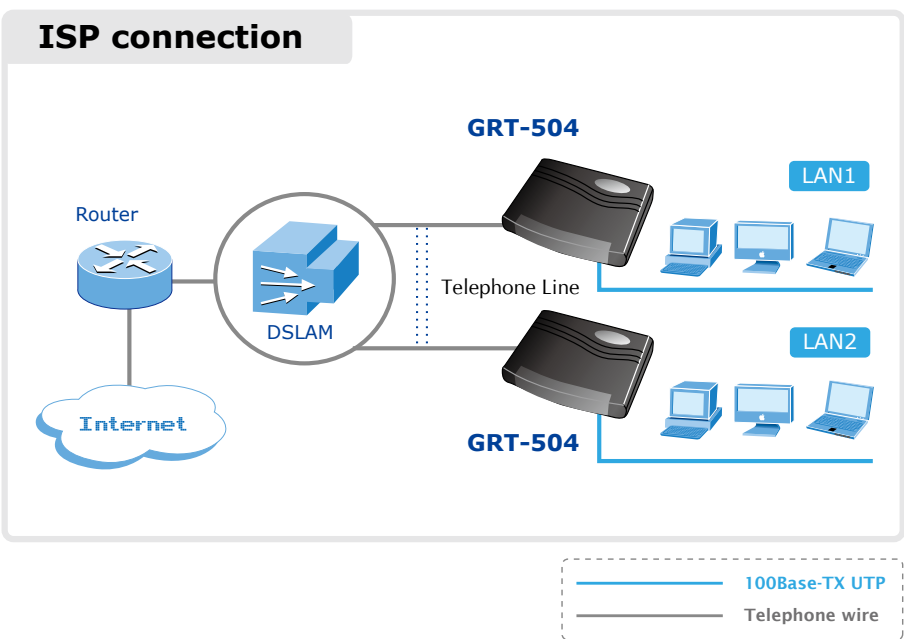
Ethernet Distance extension

The GRT-504 is excellent for Ethernet to extend distance over existing telephone wires. With two pair of AWG-26 or AWG-24 copper wire, it is easy to connect two Ethernet networks far away (maximum 6.7km/4.2 miles).



ISP Solution

G.SHDSL.bis is the best solution to quickly provide cost-effective, high speed network service to SME and SOHO users which need high-speed symmetrical Internet connections. By utilizing the existing telephony infrastructure, network installation is simple and straightforward. With up to 11.4 Mbps full duplex speed, IP telephony, website hosting and various broadband applications can be easily provided.



SPECIFICATION

Product	4-Wire G.SHDSL.bis Firewall Router
Model	GRT-504
Hardware	
Standard	Compliant with ITU-T G.991.2 Standard Annex A/B Compliant with G.SHDSL.bis Annex A/B/F/G TC-PAM Line Code Symmetric data transmission speed up to 11.4 Mbps on 4-wire Multi-range from 384 Kbps to 11.4 Mbps
Protocol	RFC 1577 - Classical IP over ATM (RFC 1577) RFC 2364 - PPP over ATM RFC 1483/2684 - Ethernet over ATM RFC 2516 - PPP over Ethernet (fixed and dynamic IP) RFC 2364 - PPP over ATM (fixed and dynamic IP)
AAL and ATM Support	Support up to 8 PVCs ATM Forum UNI 3.1/4.0 PVC Support OAM F4 / F5 AIS/RDI and loopback VC multiplexing and SNAP/LLC Integrated ATM QoS support (UBR,CBR,VBR-rt, and VBR-nrt)
WAN Port	1 x RJ-45 (Auto-Negotiation)
LAN Port	4 x RJ-45 (10Base-T/100Base-TX, Auto-Negotiation, Auto MDI/MDI-X)
Console	1 x RS-232 (DB9)
Button	1 x Reset Button
LED Indicators	PWR, WAN LNK/ACT, LAN 1/2/3/4, ALM
Software	
Protocol and Advanced Functions	IEEE 802.1D transparent learning bridge IEEE 802.1Q VLAN Support IP/TCP/UDP/ARP/ICMP/IGMP protocols IP routing with static routing and RIPv1/RIPv2 IP multicast and IGMP proxy Network address translation (NAT/PAT) DMZ host/Multi-DMZ/Multi-NAT function Virtual Server (RFC1631) DNS relay and caching DHCP server, client and relay IP QoS
Security	Built-in NAT and SPI Firewall PPP over PAP (RFC1334) PPP over CHAP (RFC1994) Password protection for system management
VPN	VPN (PPTP/L2TP/IPSec) pass-through
Management	Web-based configuration Command-line Interpreter(CLI) via Console Command-line Interpreter(CLI) via Telnet Software upgrade via web-browser/TFTP server SNMPv1 and v2
Environment Specification	
Dimension (W x D x H)	145 x 188 x 33 mm
Power	9V DC, 1A
Temperature:	Operating: 0~45 Degree C, 0~90% (non-condensing),
Humidity	Storage: -10~70 Degree C, 0~95% (non-condensing)
Emission	FCC, CE

ORDERING INFORMATION

GRT-504	4-Wire G.SHDSL.bis Firewall Router (4 x RJ-45, 1 x RJ-45)
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RELATED PRODUCTS

GRT-501	G.SHDSL.bis Bridge Router (1 x RJ-45, 1 x RJ-45)
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