

# 510Di-4P

1 pair / 2 pair / 4 pairs G.SHDSL Bridge / Router



## Description

510Di-4P is a high-speed product of Taicom G.SHDSL series. Understanding the urgent needs of both bandwidth and routing functions, 510Di-4P is designed to provide the business customer a high performance standalone unit with rich of routing features via single/two/four pairs G.SHDSL line. Strongly committed to user-friendly configuration, 510Di-4P supports Web-based and GUI-based configuration features for configuring the unit in the easiest way ever.

## Features

- Easy configuration and management with password control for various application environments
- Efficient IP routing and transparent learning bridge to support
- broadband Internet services



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- Fully ATM protocol stack implementation over SHDSL
- Getting enhancements and new features via firmware upgrade
- Built-in 4-port 10/100Mbps switch, MTU size up to 9Kbytes
- Web, Telnet supported
- One pair or Two pairs or four pairs DSL, MTU size up to 2Kbytes
- WAN Port ping Disable /Enable
- Support IEEE802.1p with 4 – level Queue
- Support VLAN 802.1Q, QinQ
- Support 4094 VLAN and VLAN ID and VLAN tag and remove features
- Support basic firewall configuration. Support IP / MAC / DNS filter.
- Support SNTP protocol to get network time.
- Support Syslog
- Support IP version 4 and IP version 6.
- Support device loopback interface IP address
- Support IP secondary address.
- Support SNAT / DNAT.
- Support rapid spanning tree.
- PPTP, L2TP VPN or VPN pass-through for safeguarded connections
- PPPoE support user authentication with PAP / CHAP
- SNMP management with SNMPv1 / SNMPv2 agent and MIB II

## Specification

### ■ G.SHDSL Specification

- Downstream and upstream symmetrical data rates up to 60M in EFM with four pairs DSL line
- ITU G.991.2 Annex A, B, F, G
- Line Code: TC-PAM 16/32/128
- EFM bonding and SHDSL M-pair mode for 1/2/4 pairs
- Fixed/ Auto rate negotiation : compliant G.994.1
- STU-C/STU-R mode selectable
- Impedance: 135 ohm
- Performance monitoring: (error seconds, severely error seconds, unavailability seconds)
- SNR /Attenuation Value calculation



## Physical interfaces

- 4 ports RJ45 for 10/100Mbps Ethernet LAN connection
- 4 RJ-11 port for G.SHDSL connection
- 1 console port for local configuration and management
- Working temperature range: -20 ~ 60°C

## Software

### ATM Protocol

- VC multiplexing and LLC encapsulation
- Multi-protocol over AAL5 (RFC 1483/2684 bridged and routed PDU)
- Classical IP over ATM (RFC 1577 with MTU = 1500)
- 8 PVCs
- UNI 3.1/4.0 PVC
- I.610 OAM F5 loopback

### PPP Support

- PPP (RFC 1661)
- PPP over Ethernet (RFC 2516)
- User authentication with PAP/CHAP
- PPTP and L2TP ( VPN )

### Routing Capability

- Support IP/TCP/UDP/ARP/ICMP protocols
- IP routing with static routing and RIPv2 (RFC1058/2453)
- Network address translation (NAT/PAT) (RFC1631)
- DNS relay and caching (RFC1034/1035)
- DHCP server (RFC2131/2132)
- Support IP / MAC / DNS Filter
- Support DDNS function
- Support OSPF
- Support BGP

### Bridging

- IEEE 802.1D transparent learning bridge
- Up to 2048 MAC learning addresses
- Rapid spanning tree ( 802.3w )

### Configuration

- Local console (RS232)
- Telnet access
- SSH



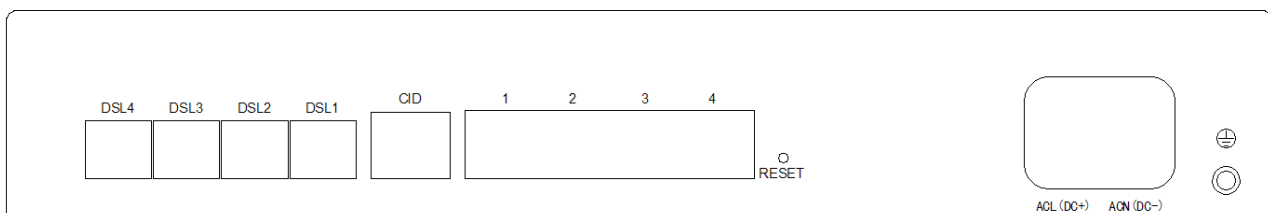
- Web-based GUI (HTTP)
- Web-based GUI (HTTPS)

### Network Management

- Web-based GUI for express setup, configuration and management
- Local console and Telnet access, command line and configure for sub-interfaces.
- Password protected management and access control list for administration
- SNMP management with SNMPv1/SNMPv2c
- Software upgrade via TFTP server, FTP, HTTP, HTTPS
- Supports inband management vlan.

### ■ Hardware

Power Supply (one power socket)	AC 90~260Vac(47~63Hz), or DC -36 ~ -72 Vdc
LAN Port	RJ45 x 4
WAN Port	RJ11 x 4
Console Port	RJ45 x 1
Operating temperature	-20° to 60°C
Storage temperature	-20° to 70°C
Housing	Metal case
Dimension	262.4 mm x 139.5 mm x 44.2 mm : Metal



## Ordering

### 510Di-

i1 Specify the SHDSL loop.

1P Single pair GSHDSL only

2P Two pair GSHDSL

4P Four pair GSHDSL

