Customer Premises Equipment Product Guide

Quality choices to meet every service need

Access for a Converging World

When Experience Counts

Broadband CPE, designed for every service need. As an essential part of offering the highest performance, most comprehensive access solutions in the industry today, Zhone provides a broad family of residential and business broadband Customer Premises Equipment (CPE) products to complement its multi-service access platform capabilities.

With more than 15 years of experience and a proven track record in CPE through our acquisition of Paradyne Networks in 2005, Zhone carries forward the tradition of excellence in delivering quality, features, choices and value.

Triple Play

Zhone multi-port and WiFi ADSL2+ and VDSL2 Modems are triple play proven for IPTV enabled services. New ADSL2+ Triple Play IAD and bonding models offer a wide array of options and features.

Hospitality

Zhone's family of ADSL2+ and ADSL2+ WiFi Modems are ideal for in-room and 'hot spot' areas. Zhone offers complete hospitality packages, including filters and secure mounting brackets specifically for the hospitality market.

Business Services

Zhone provides G.SHDSL business routers along with 5.7 Mbps SHDSL.bis modems to service business needs for high-bandwidth symmetrical SME and SMB data services.

Rural and Outer Suburban Broadband

With Zhone's reach DSL broadband data services can be extended 40,000 ft/12 Km or more from the Central Office. Combined with Zhone's ReachDSL line cards for MALC and DSLAM's, service providers have a solution for the hard-to-serve rural and outer suburban customers.

ADSL2+ & ReachDSL CPE Products

1611 ADSL2+ *1-port Broadcom chipset*

- Single Ethernet port
- Embedded web UI
- Bridge or router
- DHCP server/relay
- Auto-connect feature
- PPPoE/PPPoA redirect

6382/6388 ReachDSL *TI chipset*

- 4 Ethernet ports
- Embedded web UI
- Bridge or router
- Integrated telephone filter
- DELT testing
- Auto-detect performance
- 802.11 b/g wireless (6388)

1612 ADSL2+ *4-port Broadcom chipset*

- 4 Ethernet ports
- Embedded web UI
- Bridge or router
- DHCP server/relay
- Auto-connect feature
- Firewall

6411 ADSL2+ *1-port Conexant chipset*

- Single Ethernet port
- Embedded web UI
- IGMP support
- Single USB port
- Bridge or router
- NAT
- Integrated telephone filter

6211 ADSL2+ *1-port Broadcom chipset*

- Single Ethernet port
- Embedded web UI
- USB single port
- Bridge or router
- DHCP server/relay
- Integrated telephone filter
- Firewall

6412 ADSL2+ *4-port Conexant chipset*

- 4 Ethernet ports
- Embedded web UI
- Bridge or router
- IGMP support
- NAT
- Integrated telephone filter
- 802.11 b/g wireless (6218)

6212/6218 ADSL2+ *Broadcom chipset*

- 4 Ethernet ports
- Embedded web UI
- Bridge or router
- IGMP support
- 802.11 b/g wireless (6218)

6228 ADSL2+ bonded *Broadcom chipset*

- 4 Ethernet ports
- Embedded web UI
- Bridge or router
- IGMP support
- Integrated telephone filter
- 802.11 b/g wireless

6381 ReachDSL *TI chipset*

- Single Ethernet port
- Embedded web UI
- Single USB port
- Bridge or router
- Integrated telephone filter
- DELT testing
- Auto-detect performance
- 802.11 b/g wireless (6388)

6238 ADSL2+ WiFi IAD *Broadcom chipset*

- Single USB port
- Embedded web UI
- IGMP support
- 4 Ethernet ports
- 2 FXS & 1 FXO ports (voice)
- SIP voice gateway
- Lifeline support
- Bridge or router
- Integrated telephone filter
- 802.11 b/g wireless

ADSL2+ & REACHDSL CPE PRODUCTS

ACCESS FOR A CONVERGING WORLD

VDSL2 Modems & SHDSL Business Routers

6610 VDSL2 1-port *Conexant chipset*

- Single Ethernet port
- G.993.2 VDSL2 standard
- Speeds up to 100 Mbps
- PPP over ATM/Ethernet
- Console port
- Bridged mode only
- Integrated telephone filter

6652 VDSL2 4-port *Ikanos chipset*

- G.993.2 VDSL2 standard
- Embedded web UI
- Speeds up to 100 Mbps
- Bridged mode only

1740 SHDSL *Business*

- 4 Ethernet ports
- Embedded web UI
- 2/4 pair G.SHDSL (G.991.2)
- Bonded 2/4 pair
- SHDSL VPN
- PPPoE support
- DHCP/NAT
- Firewall Bridge/router

1752 SHDSL.bis *2 pair*

- 4 Ethernet ports
- Embedded web UI
- 5.7 Mbps SHDSL.bis
- G.991.2.2-2003 extended rate
- Bonds 2 pairs
- Bridge or router
- Bookend or DSLAM-CPE

1754 SHDSL.bis *4 pair*

- 4 Ethernet ports
- Embedded web UI
- 5.7 Mbps SHDSL.bis
- G.991.2.2-2003 extended rate
- Bonds 4 pairs
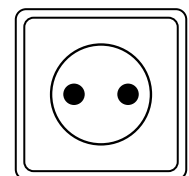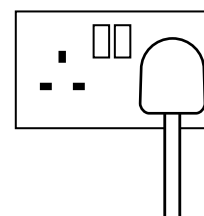- Bridge or router
- Back-to-back or DSLAM-CPE

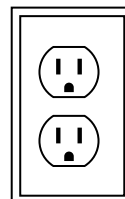## Zhone hospitality security bracket for modems

Mounts under desk or on headboard to prevent theft. Provides security for both modem and power supply.

Designed for use around the world

Zhone's broadband CPE products meet safety and regulatory certifications around the world. Most models are available with power supply order options for use in countries worldwide.

Branding Options

Zhone offers full customization options for our CPE products, giving service providers the opportunity to deliver a branded, pre-configured product to their subscribers right out of the box.
Customization options include:

- Private labeling on the CPE and shipping box
- Custom factory default configuration
- Bundled external filters and cabling
- Custom user documentation and installation CDs

CPE Quick Reference Guide

Model	DSL Tech.	Chip	Annex	Ethernet ports	USB ports	Phone filter	Tr-069	IGMP	DELT	Bridge/ Router	NAT/ DHCP	WiFi
1611	ADSL+	Broadcom	A, L, M	1	0			●		Bridging Routing	●	
1612	ADSL2+	Broadcom	A, L, M	4	0			●		Bridging Routing	●	
6211	ADSL2+	Broadcom	A, B, L, M	1	1	●	●	●	●	Bridging Routing	●	
6212	ADSL2+	Broadcom	A, L, M	4	0	●	●	●	●	Bridging Routing	●	
6218	ADSL2+	Broadcom	A, L, M	4	0	●	●	●	●	Bridging Routing	●	802.11 b/g
6381	Reach/ ADSL2+	TI	A	1	1	●			●	Bridging Routing	●	
6382	Reach/ ADSL2+	TI	A	4	0	●		●	●	Bridging Routing	●	
6388	Reach/ ADSL2+	TI	A	4	0	●		●	●	Bridging Routing	●	802.11 b/g
6411	ADSL2+	Conexant	A, L, M	1	1	●	●	●		Bridging Routing	●	
6412	ADSL2+	Conexant	A, L, M	4	0	●	●	●		Bridging Routing	●	
6228	Bonded ADSL2+	Broadcom	A, L, M G.Bond	4	0	●	●	●	●	Bridging Routing	●	802.11 b/g
6238	ADSL2+	Broadcom	A, L, M	4	1	●	●	●	●	Bridging Routing	●	802.11 b/g
6610	VDSL2	Conexant	G.993.2	1	0	●		●		Bridging		
6652	VDSL2	Ikanos	G.993.2	4	0			●		Bridging	●	
1740	SHDSL	Conexant	G.993.2 bond	4	0			●		Bridging Routing	●	
1752	SHDSL.bis	Infineon	Bond 4 pairs	4	0					Bridging Routing	●	
1754	SHDSL.bis	Infineon	Bond 4 pairs	4	0					Bridging Routing	●	

Zhone FTTx & EFM CPE Solutions

In addition to xDSL modems, Zhone provides complete ranges of CPE for FTTx and EFM applications.

Zhone offers a range of indoor and outdoor zNID ONTs with choices of interfaces and options for both residential and business applications.

zNID ONT Model Reference Chart

Model	2110	2210	2211	4110	4111	4210	4211	4212	4213	7310
Type										
GPON	●	●	●	●	●	●	●		●	●
Active E.						●		●		
Location										
Outdoor				●	●	●	●	●	●	●
Indoor	●	●	●							
Application										
Residential	●	●	●	●	●	●	●	●	●	●
Residential Gateway						●	●	●	●	
Business	●									●
Power										
Battery Backup Support		●	●	●	●	●	●	●	●	●
Interfaces										
Fast Ethernet		4	4			3	3	3	3	
Gigabit Ethernet	1			2	2					1
Voice		2	2	4	4	2	2	2	2	8
T1/E1										2
RF Coax			1		1		1		1	
HPNAv3 Coax								●	●	
HPNAv3 Phone								●	●	
Management										
SNMP/TR-069						●	●	●	●	
OMCI	●	●	●	●	●					●

EtherXtend EADs

- 1–8 pair T1/E1 and SHDSL.bis copper bonding
- Up to 45 Mbps bonded bandwidth
- Bookend or Aggregation application
- 1–4 Ethernet LAN interface options

Ethernet Access Devices (EADs)

	3300 Series	3000 Series	2200 Series	2100 Series	TNE	SNE	ENE
WAN Interface	SHDSL.bis 5.7 Mbps	SHDSL.bis 5.7 Mbps	DS3 45 Mbps	SHDSL.bis 5.7 Mbps	T1 1.544 Mbps	SHDSL 2.3 Mbps	E1 2.048 Mbps
WAN Ports	4 or 8	1, 2 or 4	1 or 2	1 or 2	1, 2, 4 or 8	1, 2 or 4	1, 2, 4 or 8
Bandwidth (at max ports)	Up to 45.6 Mbps	Up to 22.8 Mbps	Up to 90 Mbps	Up to 11.4 Mbps	Up to 12 Mbps	Up to 9.2 Mbps	Up to 16 Mbps
Loop Bonding	802.3ah EFM N2N	802.3ah EFM	N2N	N2N	N2N	N2N	N2N
LAN Interfaces 10/100 Base-T	4	4	4	1 or 2	1 (1/2 port) 4 (4/8 port)	1	1 (1/2 port) 4 (4/8 port)
Management	802.3ah inband	CLI, Web, SNMP	CLI, Web, SNMP	CLI, Web, SNMP	CLI, Web, SNMP (4/8 port)	Unmanaged	CLI, Web, SNMP (4/8 port)
QoS	802.1p	802.1p	802.1p	802.1p	802.1p		802.1p
Layer 2 Layer 3	Bridging Routing	Bridging L3 aware	Bridging L3 aware	Bridging L3 aware	Bridging L3 aware	Bridging	Bridging L3 aware