

# V5628-2A2/2B2 EPON MDU Datasheet v2.0



✓ Standalone 1U Product

✓ The EPON MDU can use for FTTB/FTTC applications

✓ In compliant with IEEE802.3ah & CTC2.1/3.0

✓ WEB/CLI/SNMP Management

✓ Support SIP(IMS)/MGCP/H.248 Protocol



## 1. Introduction

The V5628-2A2/2B2 EPON+24FE/EPON+24FE+24POTS MDU is an EPON broadband access device with "Triple-Play" and fiber to building (FTTB) independently developed by V-Solution. It is based on mature and stable Gigabit EPON Technology and L3 Ethernet switching technology, with high reliability, good quality of service (QoS) guarantee, easy management and flexible networking features. It meets the requirements of ITU-T, IEEE & YD/T Technical requirements for access network.

## 2. Product Features

- Plug and play and Support auto-discovery, auto-configuration, auto-upgrade.
- Support OAM+SNMP management.
- Lightning Protection Capability LAN: 4 kV,POTS: 4 kV, AC Power:6kV.
- Support 802.1ad(QinQ) and multicast.
- Support Line testing according to GR-909.
- Support AC or DC power supply.
- Support Dying-gasp.

#### Model V5628-2A2 V5628-2B2 NNI 1\*EPON(PX20+),SC/UPC UNI 24\*FE 24\*FE+24POTS Dimension (W×H×D) 480mm×44.5mm×240mm 3\*RJ45 (1 For EPON MAC,1 For Configuration,1 For VoIP) Console Power Input AC:100~240V or DC:-48V ≤50W **Power Dissipation** Operating Temperature -30~+55°C Operating humidity 10~90%RH(non-condensing) -40~+65°C Storage Temperature Weight 5Kg Mounting 19-inch rack,1U Rack Up to 16 K MAC address; Support 4K VLANs and IEEE802.1Q/802.1p,based on MAC,IP Subnet and protocol.Support VLAN Double-Tag; Support IEEE802.1QinQ/802.1ad and VLAN transparent transmission; Support port stability statistic and monitoring; Layer2/3 Function Support 1K multicast Route Table and support SCB; Support STP/RSTP; QoS:Support 8 levels CoS priority.Support SP,WRR,SP+WRR; Support IGMP Snooping; Support ACLbased on IP,TCP/UDP and protocol;

### 3. Technical Specifications



Support Filter based on port,MAC,VLAN ID and IP(IPv4/IPv6).   Support port-based rate limitation and bandwidth control;   In compliant with IEEE802.3ah standard;   Up to 20KM transmission Distance;   Support Dynamic Bandwidth Allocation (DBA);   Support VLAN division and user separation to avoid broadcast storm;   Support VLAN division and user separation to avoid broadcast storm;   Support various LLID configuration and single LLID configuration;   Different user and different service could provide different QoS by   means of different LLID channels;   Support power-off alarm function,easy for link problem detection;   Support port isolation between different ports;   Specialized design for system breakdown prevention to maintain stable   system;   Support dynamic distance calculation on EMS online;   Support BIP(IMS),H.248&MGCP protocol and It can well communicate   with the mainstream soft switch platforms in the industry;   Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to   128ms tail length;   VoIP Funciton   Support high/low speed fax/Modem, bypass fax, and T38 fax;   Support InBand / RFC2833/SIP INFO, MD5 authentication, call   forward, call waiting, hot-line call, and all kinds of value-added voice		
In compliant with IEEE802.3ah standard; Up to 20KM transmission Distance; Support Dynamic Bandwidth Allocation (DBA); Support ONU auto-discovery/link detection/remote upgrade of software; Support VLAN division and user separation to avoid broadcast storm; Support various LLID configuration and single LLID configuration; Different user and different service could provide different QoS by means of different LLID channels; Support power-off alarm function,easy for link problem detection; Support broadcasting storm resistance function; Support port isolation between different ports; Specialized design for system breakdown prevention to maintain stable system; Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry; Support ITU-T G.711,G.723.1 and G.729 speech codec; Support ID471G.711,G.723.1 and G.729 speech codec; Support ID471G.711,G.728.2 Support ID467.2 Support ID4710.2 S		Support Filter based on port,MAC,VLAN ID and IP(IPv4/IPv6).
Up to 20KM transmission Distance;Support Dynamic Bandwidth Allocation (DBA);Support ONU auto-discovery/link detection/remote upgrade of software;Support VLAN division and user separation to avoid broadcast storm;Support various LLID configuration and single LLID configuration;Different user and different service could provide different QoS bymeans of different LLID channels;Support power-off alarm function,easy for link problem detection;Support power-off alarm function;Support power-off alarm function;Support power-off alarm function;Support port isolation between different ports;Specialized design for system breakdown prevention to maintain stablesystem;Support SIP(IMS),H.248&MGCP protocol and It can well communicatewith the mainstream soft switch platforms in the industry;Support IDU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128m stail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax;Support IBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Line testing according to GR-909Support Modem(56Kbps)Suport Modem(56Kbps)Suport PPPoE,DHCP and static IP;	EPON Function	Support port-based rate limitation and bandwidth control;
Support Dynamic Bandwidth Allocation (DBA);Support ONU auto-discovery/link detection/remote upgrade of software;Support VLAN division and user separation to avoid broadcast storm;Support various LLID configuration and single LLID configuration;Different user and different service could provide different QoS bymeans of different LLID channels;Support power-off alarm function,easy for link problem detection;Support power-off alarm function, easy for link problem detection;Support for dynamic distance calculation on EMS online;Support for dynamic distance calculation on EMS online;Support for cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length; <tr< td=""><td>In compliant with IEEE802.3ah standard;</td></tr<>		In compliant with IEEE802.3ah standard;
Support ONU auto-discovery/link detection/remote upgrade of software; Support VLAN division and user separation to avoid broadcast storm; Support various LLID configuration and single LLID configuration; Different user and different service could provide different QoS by means of different LLID channels; Support power-off alarm function,easy for link problem detection; Support broadcasting storm resistance function; Support port isolation between different ports; Specialized design for system breakdown prevention to maintain stable system; Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry; Support ITU-T G.711,G.723.1 and G.729 speech codee; Support Lecho cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Up to 20KM transmission Distance;
Support VLAN division and user separation to avoid broadcast storm; Support various LLID configuration and single LLID configuration; Different user and different service could provide different QoS by means of different LLID channels; Support power-off alarm function, easy for link problem detection; Support broadcasting storm resistance function; Support port broadcasting storm resistance function; Support port solation between different ports; Specialized design for system breakdown prevention to maintain stable system; Support dynamic distance calculation on EMS online;Support dynamic distance calculation on EMS online;Support dynamic distance calculation on EMS online; Support heartbeat function and supports active / standby soft switch platform; Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128m stail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Modem(56Kbps) Suport Modem(56Kbps) Suport PPPeE,DHCP and static IP;		Support Dynamic Bandwidth Allocation (DBA);
Support various LLID configuration and single LLID configuration;EPON FunctionDifferent user and different service could provide different QoS by means of different LLID channels; Support power-off alarm function,easy for link problem detection; Support broadcasting storm resistance function; Support port isolation between different ports; Specialized design for system breakdown prevention to maintain stable system; Support dynamic distance calculation on EMS online;VolP FunctionSupport BP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry; Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128m stail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Modem(56Kbps) Suport Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support ONU auto-discovery/link detection/remote upgrade of software;
EPON FunctionDifferent user and different service could provide different QoS by means of different LLID channels; Support power-off alarm function,easy for link problem detection; Support broadcasting storm resistance function; Support port isolation between different ports; Specialized design for system breakdown prevention to maintain stable system; Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry; Support heartbeat function and supports active / standby soft switch platform; Support ITU-T G.711,G.723.1 and G.729 speech codec; Support heartbeat function exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support VLAN division and user separation to avoid broadcast storm;
means of different LLID channels;Support power-off alarm function, easy for link problem detection;Support broadcasting storm resistance function;Support port isolation between different ports;Specialized design for system breakdown prevention to maintain stablesystem;Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicatewith the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switchplatform;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128ms tail length;VoIP FuncitonSupport InBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Line testing according to GR-909Support PPOE,DHCP and static IP;		Support various LLID configuration and single LLID configuration;
Support power-off alarm function, easy for link problem detection;Support broadcasting storm resistance function;Support port isolation between different ports;Specialized design for system breakdown prevention to maintain stablesystem;Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicatewith the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switchplatform;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax;Support InBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Modem(56Kbps)Suport PPPoE,DHCP and static IP;		Different user and different service could provide different QoS by
Support broadcasting storm resistance function;Support port isolation between different ports;Specialized design for system breakdown prevention to maintain stablesystem;Support dynamic distance calculation on EMS online;Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicatewith the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switchplatform;Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128ms tail length;VoIP FuncitonSupport InBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Line testing according to GR-909Support Modem(56Kbps)Suport PPPoE,DHCP and static IP;		means of different LLID channels;
Support port isolation between different ports; Specialized design for system breakdown prevention to maintain stable system; Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry; Support heartbeat function and supports active / standby soft switch platform; Support ITU-T G.711,G.723.1 and G.729 speech codec; Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support power-off alarm function, easy for link problem detection;
Specialized design for system breakdown prevention to maintain stable system;Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switch platform;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support broadcasting storm resistance function;
system;Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switch platform;Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support port isolation between different ports;
Support dynamic distance calculation on EMS online;Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switch platform;Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Specialized design for system breakdown prevention to maintain stable
Support SIP(IMS),H.248&MGCP protocol and It can well communicate with the mainstream soft switch platforms in the industry; Support heartbeat function and supports active / standby soft switch platform; Support ITU-T G.711,G.723.1 and G.729 speech codec; Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length; VoIP FuncitonVoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support PPPoE,DHCP and static IP;		system;
with the mainstream soft switch platforms in the industry;Support heartbeat function and supports active / standby soft switchplatform;Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax;Support InBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Line testing according to GR-909Support Modem(56Kbps)Suport PPPoE,DHCP and static IP;		Support dynamic distance calculation on EMS online;
Support heartbeat function and supports active / standby soft switch platform;Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support SIP(IMS),H.248&MGCP protocol and It can well communicate
Platform;Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax;Support InBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Line testing according to GR-909Support Modem(56Kbps)Suport PPPoE,DHCP and static IP;		with the mainstream soft switch platforms in the industry;
Support ITU-T G.711,G.723.1 and G.729 speech codec;Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax;Support InBand / RFC2833/SIP INFO, MD5 authentication, callforward, call waiting, hot-line call, and all kinds of value-added voiceservice. Multi-party conferencingSupport Line testing according to GR-909Support Modem(56Kbps)Suport PPPoE,DHCP and static IP;		Support heartbeat function and supports active / standby soft switch
Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		platform;
128ms tail length;VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support ITU-T G.711,G.723.1 and G.729 speech codec;
VoIP FuncitonSupport high/low speed fax/Modem, bypass fax, and T38 fax; Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support Echo cancellation exceeding ITU-T G.165/G.168-2002, up to
Support InBand / RFC2833/SIP INFO, MD5 authentication, call forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		128ms tail length;
forward, call waiting, hot-line call, and all kinds of value-added voice service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;	VoIP Funciton	Support high/low speed fax/Modem, bypass fax, and T38 fax;
service. Multi-party conferencing Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		Support InBand / RFC2833/SIP INFO, MD5 authentication, call
Support Line testing according to GR-909 Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		forward, call waiting, hot-line call, and all kinds of value-added voice
Support Modem(56Kbps) Suport PPPoE,DHCP and static IP;		service. Multi-party conferencing
Suport PPPoE,DHCP and static IP;		Support Line testing according to GR-909
		Support Modem(56Kbps)
Support Web/CLI/SNMP		Suport PPPoE,DHCP and static IP;
		Support Web/CLI/SNMP



## 4. V5628-2A2/2B2 Series Application

