

4 LAN Ports
2 FXS Ports

300M WiFi
Router



IEEE802.3ah
CTC2.1, 3.0
DBA

1.25Gbps
GEPON Fiber
WAN Port

Dual Core
400Mhz CPU

Multi-WAN
Route/Bridge

VLAN, QOS
Firewall, ACL
IPv4/IPv6

Datasheet V1.1.5

SON8368MVW GEPON ONU:

The SON8368MVW is a series of IEEE802.3ah based GEPON ONU designed for home and Office users. It offers 4 LAN ports that supports mixed GE and FE ports. Its uplink interface is a GEPON SC port, supports 1.25G for downstream and 1.25G for upstream. The SON8368MVW series also offers 2 FXS ports and a 300Mbps WiFi Router for VoIP and Home wifi networking applications. Built for FTtx deployments, it supports powerful home gateway/CPE features, such as Multiple WAN, QOS, VLAN, Firewall, ACL, etc. It is an Internet Data, Voice and WiFi all-in-one GEPON CPE for deploying Triple Play networks over single fiber.

Main Characters

- IEEE802.3ah standard, compatible with Huawei, ZTE, Fiberhome, CHIMA GEPON OLTs.
- Offers 1 GEPON WAN Port, support 1.25G upstream and 1.25G downstream
- 4 * Ethernet LAN ports, supports mixed GE and FE ports

- 2*FXS ports for high quality Voice over IP deployments
- Offers a 300Mbps WiFi Router for Home WiFi applications
- Layer 3 Home Gateway/CPE features with Hardware NAT, support Multiple WAN, Route/Bridge mode, etc
- Layer 2 Switching, support 802.1Q VLAN, 802.1P QOS, Bandwidth Control, Spanning Tree, etc
- Port Binding, different LAN ports can be assigned with different WAN services
- 1:64 Fiber ratio, max transmission distance can reach 20km
- Support AES encrypted data transmission, enhancing transmission security
- Support FEC (Forward Error Correction), ensures high reliable and precise data transmission
- Support Dynamic Bandwidth Allocation (DBA), Smarter bandwidth assignment and usage.
- Local and Remote Management, support WEB, FTP/TFTP/HTTP Auto Provisioning, TR069, NMS management.
- IPv4 and IPv6, ensuring compatibility and usability in both IP network types.

Technical Parameters

GEAPON Parameters

IEEE802.3ah Gepon standard, support standard OAM
CTC 2.1, 3.0 China Telecom Gepon standard
Built-in with a 2*10 SFF packaged GEAPON transceiver, SC/PC connector
1310nm wavelength at upstream & 1490nm wavelength at downstream
GEAPON transceiver sending power: 0.5-5dbm, receiving sensitivity: -27dbm
1:64 Fiber Optic Ratio at 20km transmission distance.
Fiber Transmission cable: G.652 Single mode optical fiber cable
Support 1 LLID (Logical Link Identifier)
Support 1 LOID (Logical ONU Identifier)
Support Triple Churning Encryption algorithm
Support NSR/SR Dynamic Bandwidth Allocation (DBA)
Support Forward Error Correction (FEC)
4 QOS queues & SP Dispatching Algorithm over PON
Maximum 1.244Gbps Downlink / 1.244Gbps Uplink
Support Dying Gasp

QOS

IEEE802.1P QOS, DSCP, TOS:
SP, WRR, SP+WRR dispatching Algorithm
Source & DST-MAC based QOS
VLAN ID, Vlan Priority based QOS
Source DST-IP based QOS

Home Gateway/CPE Features

Multi-WAN, support up to 8 WAN connections
Support Route and/or Bridged WAN
Port Binding, Data/VoIP/IPTV services can be bound to different LAN ports
Configurable VLAN ID for each WAN
Configurable QOS queues for each WAN
Multi-services bound to the same WAN

Networking Features

MAC Learning, 4K MAC address table
Bridged or Route network mode
Support RIP v1, v2 for routing
Static Route, Dynamic Rout, DNS Proxy,
IPv4 & IPv6 TCP, UDP, RTP, SNTP, NAT, DHCP, DNS
IEEE802.1Q VLAN, Port VLAN
IEEE802.1x, MAC, IP, or TCP/UDP based ACLs
Port Bandwidth Control, IEEE802.3x flow control
Storm Control: Broadcast/Multicast/unknown unicast, ARP
Port Isolation, Port Mirror, Auto MDI/MDIX
IEEE802.1d STP, Port Loop detection
IGMP v2, v3 & IGMP Snooping for IPv4
MLD v2, v3 & MLD Snooping for IPv6

VoIP Parameters

Offers 2 FXS ports for Phone connections
2 Calls can be made/received simultaneously
SIP V1, V2 (RFC3261, RFC3262, RFC3264, RFC3265)
SIP & H.248, support registering 2 SIP accounts
G.711, G.723.1, G.729A-8kbps, G.726, G.722, ILBC voice codecs
DTMF Tone Detection, DTMF Tone Relay,
Multiple Calling Tone, FSK Caller ID
Calling line Identification Presentation
Calling line Identification Restriction
Call forwarding, call transfer, call hold, three-way conference, etc
QOS and TOS to ensure voice packets pass through in priority
Support RFC62 Echo protocol,
Support T.38 Fax Machine
Support Digital Map configuration

Interoperable Gepon OLT Models

CHIMA SNA8800, SNA9000T series
Huawei MA5680T, MA5683T OLTs
ZTE C200, C220, C300 series OLTs
Fiberhome AN5516 OLT

Management Features

Serial interface maintenance using UART
Web UI Management
OAM & NMS Management
CLI command line management
FTP/TFTP/HTTP Auto Provision Management
TR069 ACS management

300Mbps WiFi Router Features

Offers an IEEE802.11n WiFi Router, 2.4GHz frequency
4 LAN Ports, support mixed GE and FE ports
MIMO, support 2-IN-2-OUT, Max 300Mbps WiFi throughput
WiFi Transmission Distance: 150m for indoors, 300m for outdoors
WPS one-key protection over your wifi network
Support DHCP, Static IP and PPPOE
DHCP Server, DHCP Relay, DHCP Client, Static IP assignation
Static Routing from source IP to destination IP
Firewall, NAT, NAPT, UPnP
DDNS, DMZ Host, Port Forwarding
64/128 bit WEP, IEEE802.1x, WPA and WPA2 authentications
Max 4 SSID broadcasting, Hidden SSID
Automatically choose the best signal channel
STA mutual isolation and ACL table based on MAC Accesses
Wifi Multimedia (WMM), enhanced QOS for multimedia packets

Hardware Parameters

Built on powerful GEAPON SOC, Dual Core CPU at 400Mhz
CPU covered with cooling unit.
Support Hardware NAT.
16-bit DDR3 SDRAM, come with a 1Gb DDR3 SDRAM
Nand Flash, come with a 1Gb Nand Flash
1*GEAPON SC Port, 1.25G downstream, 1.25G Upstream
4* LAN ports, supports 4FE, 2GE+2FE or 1GE+3FE Ports
300Mbps WiFi Router,
2*7dB or 2*5dB external antennas optional
2 FXS ports, support analog phones and T.38 fax machine.
IEEE802.3x flow control Full duplex and half duplex,
LED Lights:
PWR,PON,Los,WAN,VoIP1-2,LAN1-4,WiFi,WPS,USB
External power supply. DC 12V. 1-1.5A.

Hardware Interfaces

1*GEAPON WAN Ports	2*5dB or 2*7Db External Antennas (2T2R)
4 FE ports or 2GE+2FE or 1GE+3FE Ports, or 4GE Ports	1*WiFi Button
2*FXS VoIP Ports	1*WPS Button
1*300Mbps WiFi Router	1*Reset button
Power Supply: DC 12V, 1-1.5A	1*USB port
	1*Led On/Off button

LED Indications: Power, PON, LOS, WAN, VoIP1, VoIP2, LAN1, LAN2, LAN3, LAN4, WIFI, WPS, USB

Specification Table

Standards	IEEE 802.3, IEEE 802.3u, IEEE802.3ab, IEEE802.3ah, IEEE 802.3x, IEEE802.1Q, IEEE802.1P, IEEE802.1D, IEEE802.11b/g/n, RFC2543, RFC3261, RFC3262, RFC3264, RFC3265		
WAN Port	1*GEPON WAN Port, SC/PC Connectors		
LAN Ports	4 FE or 2GE+2FE or 1GE+3FE Ports, or 4GE Ports		
VoIP Ports	2*FXS Ports		
WiFi	IEEE802.11b/g/n 300Mbps WiFi		
Ethernet Cable	10Base-Tx: UTP category 3, 4,5, up to 100m 100Base-Tx: UTP category 5, up to 100m 1000Base-Tx: UTP category 5, 5E, 6, up to 100m		
Fiber Cable	8.3μm, 8.7μm, 9μm and 10μm single mode fiber cable		
Power Supply	AC110-240V Input, DC 12V, 1-1.5A output		
Temperature & Humidity		Temperature	Humidity
	Working	0 to 50°C	10% - 90%
	Standby	-20 to 70°C	5% - 90% RH

Order Information

Model NO.	Description	
Notice: All models supports Router or Bridge mode, or mixed Router/Bridge mode		
4 FE Models	SON8368M	4FE GEPON ONU
	SON8368MV	4FE+2FXS GEPON ONU
	SON8368MW	4FE+300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MW-7dB	4FE+300M WiFi Router GEPON ONU, 7dB antennas
	SON8368MVW	4FE+2FXS+300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MVW-7dB	4FE+2FXS +300M WiFi Router GEPON ONU, 7dB antennas
1GE+3FE Models	SON8368MG	1GE+3FE GEPON ONU
	SON8368MVG	1GE+3FE+2FXS GEPON ONU
	SON8368MWG	1GE+3FE+300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MVWG	1GE+3FE+2FXS+300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MWG-7dB	1GE+3FE+300M WiFi Router GEPON ONU, 7dB antennas
	SON8368MVWG-7dB	1GE+3FE+2FXS +300M WiFi Router GEPON ONU, 7dB antennas
2GE+2FE Models	SON8368MG2	2GE+2FE GEPON ONU
	SON8368MVG2	2GE+2FE+2FXS GEPON ONU
	SON8368MWG2	2GE+2FE+300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MWG2-7dB	2GE+2FE+300M WiFi Router GEPON ONU, 7dB antennas
	SON8368MVWG2	2GE+2FE+2FXS +300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MVWG2-7dB	2GE+2FE+2FXS +300M WiFi Router GEPON ONU, 7dB antennas
	SON8368MG4	4GE GEPON ONU

4 GE Models	SON8368MVG4	4GE+2FXS GEPON ONU
	SON8368MWG4	4GE+300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MWG4-7dB	4GE+300M WiFi Router GEPON ONU, 7dB antennas
	SON8368MVWG4	4GE+2FXS +300M WiFi Router GEPON ONU, 5dB antennas
	SON8368MVWG4-7dB	4GE+2FXS +300M WiFi Router GEPON ONU, 7dB antennas