**4 FE Port
1 CATV RF**

**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

SON8368FWT GEPON ONU:

The SON8368FWT is an IEEE802.3ah based GEPON ONU designed for family users. It offers 4 Fast Ethernet and 1 CATV RF Ports for Internet and TV outputs. It is also built in with a 300Mbps WiFi router. The SON8368FWT supports full Home Gateway features, such as Multiple WAN connections, VLAN, QOS, etc. It is a GEPON ONU for CATV Operators integrating high speed Internet and high quality TV services over single fiber.

Main Characters

- IEEE802.3ah GEPON standard, compatible with Huawei, ZTE, Fiberhome, CHIMA GEPON OLTs.
- Offers 1 GEPON WAN Port, support 1.25G upstream and 1.25G downstream
- Offers 4 *10/100Base-Tx Ethernet ports, can be configured in Route or Bridge mode
- Offers 1 CATV RF port, support high quality TV image transmissions over 1550nm Fiber.
- Offers a 300Mbps WiFi router, satisfy your WiFi requirement for home & Office

- Max 1:64 Fiber ration, max transmission distance can reach 20Km
- 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
- 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

GEPON 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 GEPON transceiver, SC/PC connector

1310nm wavelength at upstream & 1490nm wavelength at downstream

GEPON 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

CATV Parameters

CATV Frequency range: 40~860Mhz (STV Optional: 40~2200MHZ)

RF 75ohm Coaxial Cable TX port: Metric F or England F

RF output power: ≥ 80dBuV at input optical power =-6dBm

Band Flatness:TV±1dB, (Optional: STV±2dB)

CNR ≥47dB, CSO≤-61dB, CTR≤-61dB

Support Enable or Disable CATV service remotely

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

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

300Mbps WiFi Router Features

Offers an IEEE802.11n WiFi Router, 2.4GHz frequency

4*10/100Base-Tx Fast Ethernet 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 GEPON 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*GEPON SC Port, 1.25G downstream, 1.25G Upstream

4*10/100Base-Tx Fast Ethernet Ports

300Mbps WiFi Router,

2*5dB external antennas optional

IEEE802.3x flow control Full duplex and half duplex,

LED Lights:

Power, PON, LOS, WAN, TV, LAN1-4, WIFI, WPS, USB

External power supply, DC 12V, 1-1.5A.

Hardware Interfaces

1*GEPON WAN Port

4*10/100Base-Tx LAN ports, support Auto MDI/MDI-X

1*CATV RF Port

1*300Mbps WiFi Router

LED Indications: Power, PON, LOS, WAN, TV, LAN1-4, WIFI, WPS, USB

2*5dB Internal Antennas (2T2R)

1*USB port

1*Power Supply Jack

1*WiFi Button

1*WPS Button

1*Reset button

Power Supply: DC 12V, 1.5A

Specification Table

Standards	IEEE 802.3,IEEE 802.3u, IEEE802.3ah, IEEE 802.3x, IEEE802.1Q, IEEE802.1P, IEEE802.1D, IEEE802.11b/g/n		
WAN Port	1*GEPON WAN Port, SC/PC Connectors		
LAN Ports	4*10/100Base-Tx Fast Ethernet LAN Ports		
TV Port	1*CATV RF Port		
WiFi	IEEE802.11b/g/n 300Mbps WiFi, 2*5dB internal Antennas		
Ethernet Cable	10Base-Tx: UTP category 3, 4,5, up to 100m 100Base-Tx: UTP category 5, up to 100m		
Fiber Cable	8.3μm, 8.7μm, 9μm and 10μm single mode fiber cable		
Power Supply	AC110-240V Input, DC 12V, 1.5A output		
Temperature & Humidity		Temperature	Humidity
	Working	0 to 50℃	10% - 90%
	Standby	-20 to 70℃	5% - 90% RH

Order Information

Model NO.	Description
SON8368FWT	4FE+1CATV+300M WiFi GEPON ONU