



SA8254M

1*GE+1FE+ 1*FXS+2.4G WIFI



Overview

To deliver triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application, the GPON RGU (Residential Gateway Unit) SA8254M incorporates interoperability, key customers' specific requirements and cost-efficiency.

Equipped with ITU-T G.984 compliant 2.5G Downstream and 1.25G Upstream GPON interface, SA8254M supports the full Triple Play of services including voice, video, and high speed internet access service.

Compliant with standard OMCI definition, SA8254M is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

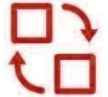
SA8254M Highlights



Cost-effective 2.4G WIFI

SA8254M is the Single-band WIFI GPON Gateway, 2.4GHz up to 300Mbps

GPON/GEPON auto-adaptive

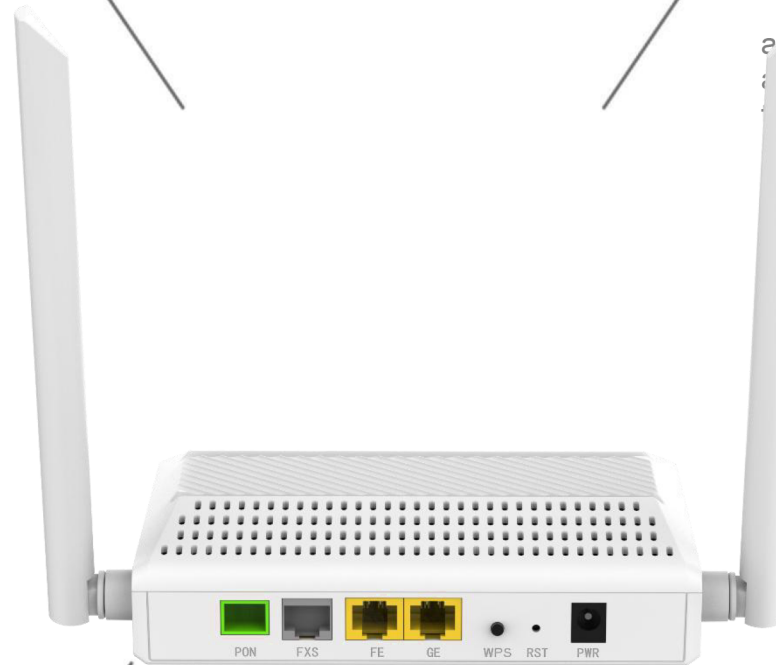


The SA8254M is a PON/GEPON auto-adaptive ONU, which is working as a TTH Gateway Unit to help telecom operators to deliver triple-play services (Internet, Video, Voice) on fiber



Rich Interfaces

SA8254M is built with the interfaces of 1*GE+1*FE+1*FXS+ Single-Band WIFI, which meets the needs of all scenarios.



SA8254M Main Specification



SA8254M Hardware

Interface Description

WAN (Fixed Optical Connector)	SC/APC or SC/UPC
LAN	1*10/100/1000 Base-T with RJ45 connectors 1*10/100 Base-T with RJ45 connector
Voice	1* FXS voice ports with RJ11 connectors
WLAN	Single-Band WIFI 2.4GHz MIMO 2*2 IEEE 802.11b/g/n Compliant
Antenna	2* 3dBi External Wireless Antenna
WPS	1*WPS
Reset	1*Pinhole Reset Button
Power	+12V (external AC/DC adapter)

LED Indicator

Power LOS PON LAN1 LAN2 POTS WIFI WPS

GPON features

SFF type laser, SC/APC, or SC/UPC connector

Bosa onboard optical solution

Receiving sensitivity -28dBm (-33dBm optional), and -8dBm overload, Transmitting optical power: 1.5dBm~+4dBm

SA8254M Main Specification



1.244 Gbps burst mode upstream transmitter; 2.488 Gbps downstream receiver	
Wavelengths: upstream 1310nm, downstream 1490nm	
Ethernet features	
1* 10/100/1000/ 1*19/100 Base-T MDI/MDIX RJ-45 port compliant	
IEEE 802.3/802.3u	
Hardware-based 10/100/1000, full/half, flow control auto-negotiation	
Non-blocking wire-speed reception and transmission Full duplex IEEE 802.3x flow control and half-duplex backpressure flow control	
WLAN features	
Compliant with IEEE 802.11 b/g/n/ac/ax	
2.4GHz, MIMO 2×2, transmission bandwidth up to 300Mbps	
Power Supply	
Power supply	External AC/DC power adapter 12V 1A
Power Consumption	less than 10W
Working Environment	
Temperature	-10℃ ~ 45℃
Humidity	8%~ 95% relative humidity
Installation	
Desk	Desk-top
Wall	Wall-Mounted

SA8254M Main Specification



SA8254M Software

GPON

ITU-T G.984.X standard Complaint

Multiple T-CONTs & GEM Ports per device

Flexible mapping between GEM Ports and T-CONT Support for Multicast GEM Port

AES-128 Decryption with key generation and switching

FEC (Forward Error Correction)

802.1p mapper service profile on U/S

Activation with automatic discovered SN and password in conformance with ITU-T G.984.3

Support Multicast GEM port

Support loop detection

Gateway

Multiple WAN interfaces supporting

WAN Connection: PPPOE, DHCP, Static

Support IPV4/IPV6 dual-stack

Support port forwarding and DHCP server for LAN devices

Support NAT and NAPT

Support ACL (Access Control List)

VPN pass-through PPTP, L2TP, IPSec

Support Firewall

Support ALG, DMZ, DDNS, UTP, UPNP

SA8254M Main Specification



Ethernet/IP

802.1D bridging

VLAN tagging/detagging per Ethernet port

IP ToS/DSCP to 802.1p mapping

Class of Service based on UNI, VLAN-ID, 802.1p bit, and combination

Marking/remarking of 802.1p

IGMP v2/v3 snooping and IGMP snooping with a proxy report

Broadcast/Multicast rate limiting

VOIP

3-REN

Multiple Codecs: G.711 G.729, G.723.1

Multiple Protocol support: SIP (RFC3261), MEGACO v2 (H.248), SDP (RFC2327), RTP (RFC3550/3551)

T.38 FAX

Support various CLASS services – Caller ID, Call Waiting, Call Forwarding, Call Transfer, Call Toggle, Three-Way Calling, Distinctive Ringing, etc.

WLAN

Compliant to IEEE 802.11b/g/n

Support Multiple SSID, Support SSID hidden

Support WPA/WPA2

MAC Filter based on each SSID

SA8254M Main Specification



Management

Webpage management by default IP address

Remote access by WAN interface through HTTP, HTTPS, Telnet, SSH

Standard-compliant OMCI interface as defined by ITU-T G.984.4 and G.978

Compliant to TR-069, TR-098, TR-104

Support SNMP

Two software hold with integrity checking and automatic rollback