

# 9603C XPON ONU 1GE+1FE+CATV+WIFI BOB

## SPECIFICATION

### MODEL: SUR3107XR

## 1. Overview

- SUR3107XR is designed as HGU (Home Gateway Unit) in different FTTH solutions. The carrier-class FTTH application provides different services access.
- SUR3107XR is based on mature and stable, cost-effective XPON technology.
- SUR3107XR adopts high reliability, easy management, configuration flexibility and good quality of service guarantees to meet the technical performance of EPON Standard of China Telecom CTC3.0 and GPON Standard of ITU-TG.984.X

## 2. Functional Feature

- Support EPON/GPON mode and switch mode automatically
- Support Route mode for PPPoE/IPoE/Static IP and Bridge mode
- Support IPv4 and IPv6 Dual mode
- Support 2.4G WIFI and 2\*2 MIMO
- Support CATV interface for Video Service and remote control by Major OLT
- Support LAN IP and DHCP Server configuration
- Support Port Mapping and Loop-Detect
- Support Firewall function and ACL function
- Support IGMP Snooping/Proxy multicast feature
- Support TR069 remote configuration and maintenance
- Specialized design for system breakdown prevention to maintain stable system

### 3. Hardware Specification

Technical item	Details
PON Interface	1 GPON BOB (Class B+/Class C+)
	Receiving Sensitivity: $\leq -27\text{dBm}/\leq -29\text{dBm}$
	Transmitting optical power: $+0.5\sim+5\text{dBm}/+2\sim+7\text{dBm}$
	Transmission distance: 20KM
Wavelength	TX: 1310nm, RX: 1490nm
Optical Interface	SC/APC Connector
Design Scheme	CPU Single Core 950MHz+500MHz, DDR2 128MB
Chip Spec	RTL9603C+RTL8192FR BOB
Flash	SPI Nor Flash 16MB
LAN Interface	1 x 10/100/1000Mbps (GE) and 1 x 10/100Mbps (FE) auto adaptive Ethernet interfaces. Full/Half, RJ45 connector
Wireless	Compliant with IEEE802.11b/g/n,
	Operating frequency: 2.400-2.4835GHz
	support MIMO, rate up to 300Mbps,
	2T2R, 2 external antenna 5dBi,
	Support: Multiple SSID
	Channel: Auto
	Modulation type: DSSS, CCK and OFDM
CATV Interface	Encoding scheme: BPSK, QPSK, 16QAM and 64QAM
	RF, WDM, Optical Power: $+2\sim-15\text{dBm}$
	Optical reflection loss: $\geq 45\text{dB}$
	Optical receiving wavelength: $1550\pm 10\text{nm}$
	RF frequency range: 47~1000MHz, RF output impedance: 75 $\Omega$
	RF output level: 78dBuV
	AGC range: $-13\sim+1\text{dBm}$
MER: $\geq 32\text{dB}@-15\text{dBm}$	
LED	9 LED, For Status of Wi-Fi, WPS, PWR, LOS, PON, LAN1~LAN2, Worn, Normal (CATV)
Push-Button	3, For Function of Reset, WLAN, WPS
Operating Condition	Temperature: $0^{\circ}\text{C}\sim+50^{\circ}\text{C}$
	Humidity: 10%~90% (non-condensing)
Storing Condition	Temperature: $-30^{\circ}\text{C}\sim+60^{\circ}\text{C}$
	Humidity: 10%~90% (non-condensing)
Power Supply	DC 12V/1A
Power Consumption	$\leq 6\text{W}$
Dimension	180mm×107mm×28mm (L×W×H)
Weight	Net Weight 0.2KG, Gross Weight 0.40KG

## 4. Panel lights Introduction

Pilot Lamp	Status	Description
WIFI	On	The WIFI interface is up.
	Blink	The WIFI interface is sending or/and receiving data (ACT).
	Off	The WIFI interface is down.
WPS	Blink	The WIFI interface is securely establishing a connection.
	Off	The WIFI interface does not establish a secure connection.
PWR	On	The device is powered up.
	Off	The device is powered down.
LOS	Blink	The device does not receive optical signals or with low signals.
	Off	The device has received optical signal.
PON	On	The device has registered to the PON system.
	Blink	The device is registering the PON system.
	Off	The device registration is incorrect.
LAN1~LAN2	On	Port (LANx) is connected properly (LINK).
	Blink	Port (LANx) is sending or/and receiving data (ACT).
	Off	Port (LANx) connection exception or not connected.
Worn (CATV)	On	Input optical power is higher than 3dbm or lower than -15dbm
	Off	Input optical power is between -15dbm and 3dbm
Normal (CATV)	On	Input optical power is between -15dbm and 3dbm
	Off	Input optical power is higher than 3dbm or lower than -15dbm

## 5. Appearance



## 6. Application

- Typical Solution: FTTH (Fiber to The Home)
- Typical Business: INTERNET, IPTV, Wi-Fi, CATV, etc.

## 7. Ordering Information

Product Name	Model	Description
XPON ONU	SUR3107XR	<ul style="list-style-type: none"> <li>✓ 1piece XPON ONU</li> <li>✓ 1GE+1FE+CATV +Wi-Fi,</li> <li>✓ 1piece External Power Supply Adapter,</li> <li>✓ 1piece User's Manual</li> </ul>

