PRODUCT DATASHEET

SCOPUS®
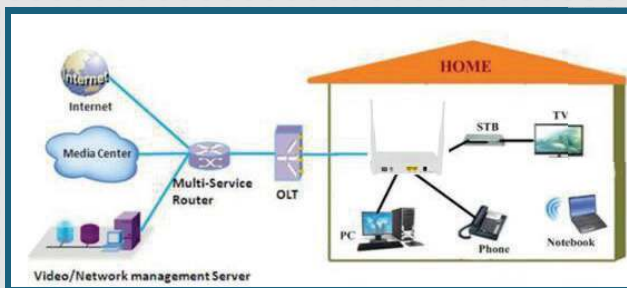*Redefining Fiber to Home*

SC5520GWV GPON ONU

PRODUCT INTRODUCTION
SC5520GWV terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. The box is based on the mature Gigabit GPON technology, which have high ratio of performance to price, and the technology of 802.11 n Wi-Fi (2T2R), Layer 2/3, and high quality VoIP as well. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And It is fully compliant with technical regulations such as ITU-T G.984.x and technical requirement of GPON Equipment (V2.1 and above version)

NETWORK MODE
SC5520GWV is the FTTH mode terminal equipment which designed for indoor applications.

INTERFACE OF DEVICE

Port Type	Function
PON port	Connect PON port with internet by SC/APC type, single mode optical fiber cable
FXS port	Connect the telephone with FXS port by telephone wire
LAN1 port	RJ45 Port connects to local internet speed 10/100/1000Mbps
LAN2 port	RJ45 Port connects to local internet,speed 10/100Mbps
Reset button (RST)	Press down reset button and keep 5 seconds to make the device restart and recover from the factory default Settings
PWR port (DC 12V)	Connect with power adapter
Power turn on/off	Power turn on/off

GPON INTERFACE SPECIFICATIONS

Parameter	Nominal
Connector style	SC/APC
PON quantity	1
Fiber style	Single mode
Wavelength	TX : 1310 +/-20nm RX : 1490 +/-10nm
PON interface standard	ITU-T G.984.2/ITU-T G.984.3/ ITU-TG.988 Class B+
PON interface receiving rate	2.488Gpbs
PON interface transmitting rate	1.244Gpbs
Output optical power	Min: 0.5dBm Max: +5dBm
Optical receiver sensitivity	Precede –29dBm
The length of the optical link	Max 20km

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INDICATORS OF DEVICE

Indicators	Status	Description
POWER	Light on	ONU power supply normally
	Light off	ONU no power supply
PON	Light on	ONU link active
	Blink	ONU manage to link
	Light off	ONU receiving power rate lower than optical receiver sensitivity
LOS	Blink	Device does not receive optical signals
	Light off	Device has received optical signal
WIFI	Light on	Wi-Fi turn on
	Light off	Device is power off or Wi-Fi turn off
	Blink	Wi-Fi turn on and with ongoing data transmission
INTERNET	Light on	Internet is effective
	Light off	internet is ineffective
LAN1	Light on	network port linked, but no data transmitting
	Blink	network port data pass
	Light off	ONU no power supply or internet cable unlink
LAN2	Light on	network port linked, but no data transmitting
	Blink	network port data pass
	Light off	ONU no power supply or internet cable unlink
FXS	Light off	VOIP account is not used
	Every 1s blink	SIP server is not registered
	Light on	Registered to the SIP server and can be used
	Every 0.25s blink	Send and receive voice data
SYS	Light on	The system has been started
	Light off	System start abnormal

WIFI SPECIFICATIONS

Standard	IEEE 802.11 b/g/n

Wi-Fi Parameter

Frequency	2.4~2.4835GHz
Transmission speed	2.4GHz Frequency:
	IEEE 802.11b：11/5.5/2/1M(Auto)
	IEEE 802.11g：54/48/36/24/18/12/9/6(Auto)
	IEEE 802.11n：270/243/216/162/108/81/ 54/27Mbps,up to 300Mbps
Channel number	2.4GHz：13
Spread-spectrum Technique	DSSS(Direct sequence spread spectrum)
Data Modulation	DBPSK、DQPSK、CCK and OFDM (BPSK/QPSK/16-QAM/64-QAM)
Sensitivity@PER (Package error rate)	270M：-68dBm@10% PER；130M：-68dBm@10% PER； 108M：-68dBm@10% PER；54M：-68dBm@10% PER 11M：-85dBm@8% PER；6M：-88dBm@10% PER 1M：-90dBm@8% PER；
Transmission distance	Indoor Maximum 120 meters；Outdoor Maximum 360 meters(The distance depends on the environment)
RF power	20dBm EIRP
Antenna	5dBi Antennas

PHYSICAL STRUCTURE, ENVIRONMENT AND ELECTRICAL PARAMETER

Parameter	Nominal
Dimension	180mm×148mm×30mm(L×W×H)
Net weight	0.25kg
Typical power consumption	<7W
Noise	None
Cooling style	Naturally cooling
Power supply	12V DC（By external AC/DC adapter）
Installation style	Support PC, wall mount or put inside of information box.
Environment	-5~50℃
Atmospheric pressure	70~106Kpa
MTBF	50,000hours
MTTR	30minutes
Parameter	Nominal

POTS SPECIFICATIONS

- Support SIP voice protocol
- Support H.248 voice protocol
- SIP protocol: ISP provide the port number of the main SIP proxy server and terminal VOIP
- Value range is 1-65535, system default value is 5060
- H.248 protocol: ISP provide port number of the spare MGC server and VOIP terminal
- Value range is 1~65535, system default value is 2944
- Port ringing current voltage: 50±10VAC☒30±10H
- Port type POTS(VOIP)
- Support G.711 A-Law/u-Law,G729A/B,G.723.1-5.3/ 6.3,G.726.etc.voice coding/compressed technology

SPECIAL FUNCTION

- Support TR069,NAT,DMZ,DNS features
- Support Multiple ssid
- Support Multiple VLAN
- Support IPV6 PPPoE , DHCP and Static IP configuration for WAN Interface
- Support IP, MAC filtering, Firewall Functionality in routed mode