

# DigiSAT DSXO-1004CWV - GPON ONU



# TECHNICAL /FEATURES

#### 1. Overview

- DSXO-1004CWV is designed as HGU (Home Gateway Unit) in deferent FTTH solutions by DigiSAT,
  The carrier class FTTH application provides data service access.
- DSXO-1004CWV is based on mature and stable, cost-effective XPON technology. It can switch automatically with EPON and GPON when it access to the EPON OLT or GPON OLT.
- DSXO-1004CWV adopts high reliability, easy management, configuration flexibility and good quality of service (QoS) guarantees to meet the technical performance of the module of GPON Standard of ITU-TG.984.X

#### 2. Functional Feature

- Support EPON/GPON mode and switch mode automatically
- Support ONU auto-discovery/Link detection/remote upgrade of software
- WAN connections support Route and Bridge mode
- Route mode supports PPPoE/DHCP/ static IP
- Support QoS and DBA
- Support port Isolation and port vlan configuration
- Support Firewall function and IGMP snooping multicast feature
- Support LAN IP and DHCP Server configuration
- Support Port Forwarding and Loop-Detect
- Support TR069 remote configuration and maintenance
- Specialized design for system breakdown prevention to maintain stable system

# 3. Hardware Specification

PON Interface	1 G/EPON port(EPON PX20+ and GPON Class B+)		
	Receiving sensitivity: ≤-27dBm		
	Transmitting optical power: 0~+4dBm		
	Transmission distance: 20KM		
Wavelength	TX: 1310nm, RX: 1490nm		
Optical Interface	SC/APC Connector		
POTS interface	1 FXS, RJ11 connector Support: G.711/G.723/G.726/G.729 codec Support: T.30/T.38/G.711 Fax mode, DTMF Relay Line testing according to GR-909		
LAN Interface	1 x 10/100/1000Mbps and 3 x 10/100Mbps auto adaptive Ethernet interfaces. Full/Half, RJ45 connector		
	RF, WDM, optical power : +2~-18dBm		
	Optical reflection loss: ≥45dB		
	Optical receiving wavelength: 1550±10nm		
CATV Interface	RF frequency range: 47~1000MHz, RF output impedance: 75Ω		
	RF output level: 78dBuV		
	AGC range: 0~-15dBm		
	MER: ≥32dB@-15dBm		
	Compliant with IEEE802.11b/g/n,		
	Operating frequency: 2.400-2.4835GHz		
	support MIMO, rate up to 300Mbps,		
Wireless	2T2R,2 external antenna 5dBi,		
VVIICICSS	Support: Multiple SSID		
	Channel: Auto		
	Modulation type: DSSS, CCK and OFDM		
	Encoding scheme: BPSK, QPSK, 16QAM and 64QAM		
LED	12 LED, For Status of WIFI、WPS、PWR、LOS、PON、LAN1~LAN4、FXS、		
	Worn Normal(CATV)		
Push-Button	3,For Function of Reset, WLAN, WPS		
Operating Condition	Temperature: 0°C~+50°C		
	Humidity: 10% ~ 90% <sup>(</sup> non-condensing)		
Storing Condition	Temperature: -30°C~+60°C		
	Humidity: 10%~90% <sup>(</sup> non-condensing)		
Power Supply	DC 12V/1A		
Power Consumption	≤6W		
Dimension	155mm×92mm×34mm <sup>(</sup> L×W×H)		
Net Weight	et Weight 0.24Kg		

# 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 doses not receive optical 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~LAN4	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.
FXS	On	Phone has registered to the SIP Server.
	Blink	Phone has registered and data transmission (ACT).
	Off	Phone registration is incorrect.
Worn	On	Input optical power is higher than 3dbm or lower than -13dbm
(CATV)	Off	Input optical power is between -13dbm and 3dbm
Normal	On	Input optical power is between -13dbm and 3dbm
(CATV)	Off	Input optical power is higher than 3dbm or lower than -13dbm

# 5. Application

- Typical Solution: FTTO (Office) - FTTB (Building) - FTTH (Home)

- Typical Business : INTERNE IPTV, IP Camera, WiFi, Voip, CATV