



DigiSAT DSXO-1002CW



TECHNICAL /FEATURES

1. Overview

- DSXO-1002CW is designed as HGU (Home Gateway Unit) in deferent FTTH solutions by DigiSAT, The carrier class FTTH application provides data service access.
- DSXO-1002CW 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-1002CW 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

Technical item	Details
PON Interface	1 G/EPON port(EPON PX20+ and GPON Class B+) Receiving sensitivity: $\leq -27\text{dBm}$ Transmitting optical power: $0\sim+4\text{dBm}$ Transmission distance: 20KM
Wavelength	TX: 1310nm, RX: 1490nm
Optical Interface	SC/APC Connector
LAN Interface	1 x 10/100/1000Mbps and 1 x 10/100Mbps auto adaptive Ethernet interfaces. Full/Half, RJ45 connector
CATV Interface	RF, WDM ,optical power : $+2\sim-18\text{dBm}$ Optical reflection loss: $\geq 45\text{dB}$ Optical receiving wavelength: $1550\pm 10\text{nm}$ RF frequency range: 47~1000MHz, RF output impedance: 75Ω RF output level: 78dBuV AGC range: $0\sim-15\text{dBm}$ MER: $\geq 32\text{dB}@-15\text{dBm}$
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 Encoding scheme: BPSK, QPSK, 16QAM and 64QAM
LED	9 LED, For Status of WIFI` 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: $10\% \sim 90\%$ (non-condensing)
Storing Condition	Temperature: $-30^{\circ}\text{C}\sim+60^{\circ}\text{C}$ Humidity: $10\%\sim 90\%$ (non-condensing)
Power Supply	DC 12V/1A
Power Consumption	$\leq 6\text{W}$
Dimension	$155\text{mm}\times 92\text{mm}\times 34\text{mm}$ (L×W×H)
Net 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 does 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~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 -13dbm
	Off	Input optical power is between -13dbm and 3dbm
Normal (CATV)	On	Input optical power is between -13dbm and 3dbm
	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