HSGQ-X411DWC

Technical Parameter

Module	Parameter
User Interface	4×10/100/1000M RJ45 port
	1×POTS
	1×USB
	300 Mbps (2.4GHz)/866 Mbps (5GHz)
PON	EPON&GPON mode adaptive Interface Type: SC-APC Security: ONU authentication mechanism Network coverage radius: 20KM
	GPON: upstream 1.25Gbps/downstream 2.5Gbps Optical receive power: −7dBm～−28dBm Transmitting optical power: 0.5dBm~5dBm
	EPON: upstream 1.25Gbps/downstream 1.25Gbps Optical receive power: −7dBm～−27dBm Transmitting optical power: 0dBm~4dBm
Ethernet	4×10/100/1000M adaptive
	Full/half duplex mode
	RJ45 connector
	Auto MDI/MDI-X
	100m distance
Size	160mm(L) × 112mm(W) × 30mm(H)
Environmental	Operating temperature: 0°C~60°C
	Operating humidity: 10%~85% non-condensing
	Storage temperature: −40°C~80°C
	Storage humidity: 5%~95% non-condensing
Power Supply	12V/1.5A DC
	Power interface size: 2.1mm/5.5mm
Power Consumption	<12W
POTS Port	1×RJ11
	Max 1km distance
	Balanced Ring, 55V RMS
Management	WEB/TELNET/TR069/OMCI/OAM
CATV	Bandwidth 54-870MHz
	Output resistance 75 ohms

Key Feature

- Support device-based rate limitation and bandwidth control
- In compliant with IEEE802.3ah & ITU-T G.984.x standard
- WiFi series meet 802.11 a/b/g/n/ac technical standards
- Up to 20KM transmission distance
- Support data encryption, group broadcasting, port Vlan separation, etc.
- Support Dynamic Bandwidth Allocation (DBA)
- Support ONU Auto-discovery/Link detection/Remote upgrade of software
- Support port VLAN configuration
- Support power-off alarm function, easy for link problem detection
- Support QOS configuration
- Support port binding
- Support port forwarding
- Support ACL to configure data packet filter flexibly
- Specialized design for system breakd own prevention to maintain stable system
- Support software online upgrading
- Support TR069 for ACS(Auto Config Server)
- Support PPPoE/DHCP Server/IPTV/POTS/NAT
- Support broadband and CATV services
- Support CATV service remote shutdown function
- Support IPv4/IPv6

Ordering Information

Product Model	Descriptions
HSGQ X411DWC	4×10/100/1000M Ethernet interface(RJ45)
	1 EPON & GPON adaptive interface
	300 Mbps (2.4GHz)/866 Mbps (5GHz)
	1×USB Interface
	1×POTS
	1×CATV

CATV

Category	Item name	Unit	Parameters
Optical Input	Wavelength	nm	1100-1600
	Input optical power	dbm	-15-0
	Optical return loss	db	>45dB
	AGC range	dbm	-10~0
Link Performance	CNR	db	>45dB
	CTB	db	>60dB
	CSO	db	>60dB
RF Output	RF Impedance	ohm	75
	RF output return loss	db	>14dB
	RF frequency Range	Mhz	47~1000
	RF output lever	dBµV	80

WiFi Feature(2.4G/5G)

- WiFi Specification IEEE802.11n compliant, 2.4 GHz/5G
- Full IEEE802.11a/b/g/n/ac legacy compatibility with enhanced performance
- Two-stream spatial multiplexing up to 866Mbps PHY data rates
- Support multi-SSID (Maximum 4 SSID)
- Support automatic channel selection
- Support hide SSID
- Support wireless security of 64/128 bit WEP, 802.1x, WPA and WPA2
- Support 20/40/80 MHz channel width
- Up to 300 Mbps for 2.4GHz
- Up to 866 Mbps for 5GHz

Product Interfaces and Indicators Definitions

POWER	Power Status	On: The ONU is power on
		Off: The ONU is power off
PON	ONU Register	On: Success to register to OLT
		Blinking: In process of registering to OLT
		Off: Fail to register to OLT
LOS	Optical Signals	Red: Optical link lower than receiver sensitivity
		Green: Optical in normal
LAN	LAN Port Status	On: Ethernet connection is normal
		Blinking: Data is being transmitted
		Off: Ethernet connection is not set up
2.4G	2.4G WiFi Status	On: WiFi function opens
		Blinking: Data is being transmitted
		Off: WiFi function closes
5G	5G WiFi Status	On: WiFi function opens
		Blinking: Data is being transmitted
		Off: WiFi function closes
VOIP	POTS Status	On: Voice account registered
		Off: Voice account not registered
WPS	WPS Status	On:Terminal has connected
		Blinking:Terminal is connecting
		Off: Terminal not connected
USB	USB Status	On: USB connection is normal
		Off: USB connection is not set up
CATV	CATV Status	On: CATV Optical power is okay
		Off: Not optical power or low optical power

Voice Service Function

- With the heartbeat function, support the main producing soft exchange platform
- Support high / low speed mode transparent transmission, T38 two fax
- Support high-speed Modem (56Kbps) dial access; support RFC2833 and redundant RFC2833, ringing, MD5 certification, call forwarding, call waiting, the hotline, alarm clock, abbreviated dialing and other value-added services;
- Support SIP (compatible with IMS), H.248,MGCP three VoIP protocol, and the soft switch platform the mainstream can be good intercommunication
- Support 1 POTS interface and the three party call, three party support local mixing
- Support POTS port GR909 line test function
- Support dynamic PPPOE, DHCP and static IP.
- Support ITU-T G.711, G.723.1, G.729 and other three kinds of compression algorithm; echo cancellation conforming to ITU-T G.168-2002, an echo canceller for the longest 128ms
- 7×24 hour call loss is less than or equal to 0.01%