



### **Overview**

CX323REWT terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. These boxes are based on the mature Gigabit EPON technology, which have high ratio of performance to price, and the technology of 802.11n WiFi (2T2R), Layer 2/3,CATV receiver and high quality VoIP as well. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And they are fully compliant with technical regulations such as IEEE802.3ah and technical requirement of EPON Equipment from China Telecom.

### **Special Features**

- Plug and play, features auto-detecting, auto-configuration, and auto firmware upgrade, etc.
- Integrated OAM remote configuration and maintenance function.
- Support rich QinQ VLAN functions and IGMP Snooping multicast features.
- Fully compatibility with OLT based on Broadcom/PMC/Cortina chipset.
- Support 802.11n WiFi(2T2R) function.
- Support NAT, Firewall function.
- Support IPv4 and IPv6 dual stack.
- Integrated line testing compliant with GR-909 on POTS.



### **Technical parameters**

Technical item	Description
	HG323REWT
Main Chipset	Realtek
CPU	600MHZ









## **Technical parameters**

Technical item	V2804REWT
Memory	64M bytes DDR3
Flash	16M SPI
PON Port Type	BOSA
PON interface	1 EPON interface, SC single-mode/single-fiber, symmetric 1.25Gbps
Wavelength	EPON Tx 1310nm, EPON Rx 1490nm
Sensitivity	<-27dBm(PX20+)
Overload	>-3dBm(PX20+)
Optical interface	SC/APC connector
LAN interface	1 x 10/100/1000Mbps+1 x 10/100Mbps auto adaptive Ethernet interfaces, RJ45 connectors
Downstream POTS interface	1 FXS, RJ11 connectors
Indicators	8 indicators, for status of power supply, PON, LAN, POTS and CATV .
WLAN	Compliant with IEEE802.11b/g/n, 300Mbps, 2T2R two internal antenna
WLAN throughput	100Mbps @ 40users, 1518bytes, no-encryption 107Mbps @ 40users, 512bytes, encryption
DC power supply	+12V,1A, external AC-DC power adaptor
Power consumption	≤10W
Operating condition	Operating temp: -5~+55°C Operating humidity:10~90%(non-condensed)
Storing condition	Storing temp: -30~+60°C Storing humidity:10~90%(non-condensed)
Dimension	185mm*33mm*122mm (W*H*D)
Net weight	0.3Kg









#### **Electonic Parameter**

Item	Parameters
Input optical power	(-18dBm) ~(+2dBm)
Optical return loss	≥45 dB
Wavelength	1550 +/- 10nm
RF frequency	47~1000MHz
AGC Range	(-14)~(-5) / (-13)~(-4) /(-7)~(+2 )dBm
C/N	≥47dB
СТВ	≥60dB
CSO	≥60dB
RF output lever	82 dBuV (@-7dBm)
RF impedance	75Ω
RF output return loss	≥14 dB

### **Function Description**

#### **Data Service Functions**

- Full speed non-blocking switching.
- 2K MAC address table.
- 64 full range VLAN ID.
- Support QinQ VLAN, 1:1 VLAN, VLAN reusing, VLAN trunk, etc.
- Integrated port monitoring, port mirroring, port rate limiting, port SLA, etc.
- Support auto polarity detection of Ethernet ports (AUTO MDIX).
- Integrated IEEE802.1p QoS with four level priority queues.
- Support IPv4 IGMP snooping and IPv6 MLD snooping.
- Support bridge, router and bridge/router mixed mode.

#### **POTS Service Functions**

- Call protocol: SIP(IMS compatible), seamless compatible with all popular call agent.
- Integrate heartbeat function and support active/standby call agent.
- Voice coding: ITU-T G.711/G.723.1(5.3K/6.3Kbit/s)/G.729, auto-negotiate with call agent.
- Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length.
- Support high/low speed fax, bypass fax, and T38 fax.
- Support high speed MODEM(56Kbps) dial access.
- Support RFC2833 and redundant RFC2833, difference rings, MD5 authentication, call forward, call waiting, hot-line call, alarm clock, and all kinds of value-added voice service.

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- Multi-party conferencing.
- Line testing according to GR-909.
- IP address assignment: dynamic PPPoE/DHCP Client and static IP.
- Support WEB, CLI,IVR,TR069.
- Call loss less than 0.01%.

#### **WIFI Service Functions**

- Integrated 802.11b/g/n, 300Mbps, 2T2R.
- Support 128 connections.
- Support WEP and WPA/WPA2 security protocols.

#### **CATV Service Functions**

- RF frequency: 45~875MHz.
- Turn on/off RF output remotely.
- RF level can be showed on PC Web real time.
- AGC Dynamic Range (dBm):-6~+2
- RF Output Level(dBuv):80

## **Application Chart**





