Powerful GPON Gateway for Triple-play Services

ZXHN F660

The F660 is a high-end home gateway in ZTE FTTH solution. By using the GPON technology, ultra-broadband access is provided for home and SOHO users. The F660 provides two POTS ports, four GE/FE auto-adapting Ethernet ports, one USB port, and one Wi-Fi port. The F660 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet and HD video services.

Highlights:

■ Superior Wireless 11N Transmission Performance

Adopting advanced 11n techniques including MIMO and channel bound, the F660 creates a superior wireless performance. With data rates up to 300Mbps, data transmission within the LAN becomes more efficient and high bandwidth applications such as HD video and online gaming run more smoothly.

■ Comprehensive VoIP Services

The F660 offers VoIP(Voice over IP) service via two FXS ports. The user may have up to two phone numbers, one private and one public, when two SIP accounts are opened. It is suitable for SOHO application.

■ IPv6 capability

With support for IPv6/IPv4 Dual Stack (DS-lite), the F660 helps operators and end users to achieve future-proof network with smooth evolution.

■ Advanced Content Sharing: DLNA Media Server

The F660 can act as a DLNA Digital Media Server(DMS). Any DLNA Digital Media Player (DMP) connected to the network, can find and play all the media contents including video, music and photos on the storage connected to the USB ports on F660.

■ Printer Server and HDD Support on USB

The F660 can be connected with USB HDD, Flash Disk or printers on the USB ports and act as file server, FTP server, and print server. It can easily support file backup, file sharing and network shared printing.

■ Quality of Service (QoS)

The QoS features of the F660 enable service providers to design QoS policies and prioritize mission-critical services such as IPTV and VoIP freely based on their individual service plans. So, service providers could deliver real multi-play applications to users and increase network efficiency.

■ Robust TR-069 Remote Management

The F660 works with TR-069 standard management specifications, allowing remote management & diagnosis, reducing the manpower needed for on-site maintenance, and increasing CSI(Customer Satisfaction Index).

■ Backup Battery Solution

To provide high reliability access and no different service experience in FTTO/H network, ZTE full serial ONUs adopt cost-effective, stable and eco-friendly backup battery solution with LiFePO4 and Ni-HM battery to provide up to 14h backup power.

■ GPON and XG-PON1 Coexistence

The optical modules installed in ZTE full serial GPON ONTs have integrated with WBF(Wavelength Block Filter) feature for future-proof evolution.

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Technical Specifications:

GPON Compliance

• ITU-T G.984.x GPON standards
•1.244Gbps burst mode upstream, 2.488Gbps downstream
• Upstream 1310nm, Downstream 1490nm
• Output optical power: Min 0.5dBm,Max +5dBm
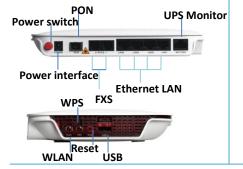• Receiver sensitivity: Better than -28dBm

Wireless

• Frequency: 2.4 GHz
• IEEE 802.11b/g/n
•128 bits WEP data encryption
• WPA/WPA2 (Wi-Fi Protected Access) Security
• WPS (Wireless Protected Setup)
• WMM(Wi-Fi Multi Media)
• Max 4 Broadcast/hide SSIDs
• Max 128 users one SSID

VoIP

• SIP/ H.248/ MGCP
• DTMF Dialing / DTMF Digits
• 5-REN, balanced ring, 55V RMS
• Codec: G.711 (μ-law and A-law), G.726, G.729, G.723.1
• 32 ms echo cancellation
• VAD/CNG
• IN-BAND method
• DTMF encoding by RFC 2833
• T.38/T.30 FAX
• Caller ID/ Call Waiting/ Call Forwarding/ Call Transfer/ Call Toggle/ Three Way Calling/ Distinctive Ringing

USB

• File sharing
• USB Fast Recovery
• Profile quick backup
• DLNA DMS
• USB 2.0, full speed, high speed

PON
Power switch
UPS Monitor
Power interface
Ethernet LAN
WPS
FXS
WLAN
Reset
USB

Router

• IPv6 / IPv4 Dual Stack
• NAT/ SNTP
• ALG
• Static routing, and dynamic routing in RIPV1/V2
• PPPoE Client/Pass Through
• DNS Client/Server
• IGMP v1/ v2/ v3
• IGMP proxy/snooping

Firewall/Security

• Traffic filtering based on UNI port, VLAN ID, 802.1p，UNI+802.1p or VLAN+802.1p
• DOS attack defending
• MAC address filtering
• BUM(Broadcast, Unicast, Multicast) attack protection
• Limit MAC address per UNI port or per ONT
• Broadcast packages rate limit
• AES-128
• Broadcast storm suppression

QoS

• Rate limitation
• Classifying upstream traffic into VLANs with various Ethernet priorities
• Marking Ethernet priority based on DSCP value
• Ingress rate limit/ Egress shaping
• SP/WRR/SP+WRR

Management

• TR-069 remote management
• Local WEB and telnet management
• Local built-in diagnostic Function
• Logs and statistics

• Loop back function
• OMCI management

Hardware Specifications

• WAN: One SC/APC port for GPON
• LAN: Four RJ-45 ports for Gigabit Ethernet interfaces
• FXS: Two RJ-11 ports for VoIP
• USB: Two USB 2.0 host interfaces
• Wi-Fi: 802.11b/g/n(2X2)
• BATTERY: One RJ-45(reverse) port for UPS monitor
• Button:
   - WLAN ON/OFF
   - WPS
   - Reset
   - Power ON/OFF
• LED Status indicators : Power, PON, LOS, ALARM, LAN1, LAN2, LAN3, LAN4, POTS1, POTS2, WLAN, WPS, USB, BATTERY

Electrical Characteristics

• Power input: 12 VDC 1.5 A
• Power consumption: Less than 11W

Physical Characteristics

• Net weight: 380g
• Size: 199 (W) x 150 (D) x 35(H) mm

Environmental Characteristics

• Operating temperature: -5°C ~ 45°C (23°F ~ 113°F)
• Humidity: 5% ~ 95% (non-condensing)

Certification

• CE certification
• Wi-Fi certification
• FCC certification
• MEF certification

Internet SS/IMS CDN
OLT
Home/Office
Wi-Fi 802.11n
STB
GE Port 1
TV
GE Port 4
PC
FXS Port
Phone
USB Port
F660
USB Memory USB Printer

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