

ALL-in-one GPON Gateway for Multi- play Services

ZXHN F668



The F668 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 F668 provides two POTS ports, four GE/FE auto-adapting Ethernet ports, one USB port, one CATV port and one Wi-Fi port. The F668 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 F668 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.

■ Advanced Content Sharing: DLNA Media Server

The F668 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 the F668.

■ IPv6 Capability

With support for IPv6/IPv4 Dual Stack, the F668 helps operators and end users to achieve a future-proof network with smooth evolution.

■ Comprehensive VoIP Services

The F668 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.

■ Multi-play Services

The F668 can provide CATV service, allow multiplication of capacity and enables bidirectional communications over one strand of fiber for CATV or Internet services.

■ Printer Server and HDD Support on USB

The F668 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 F668 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 F668 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.

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

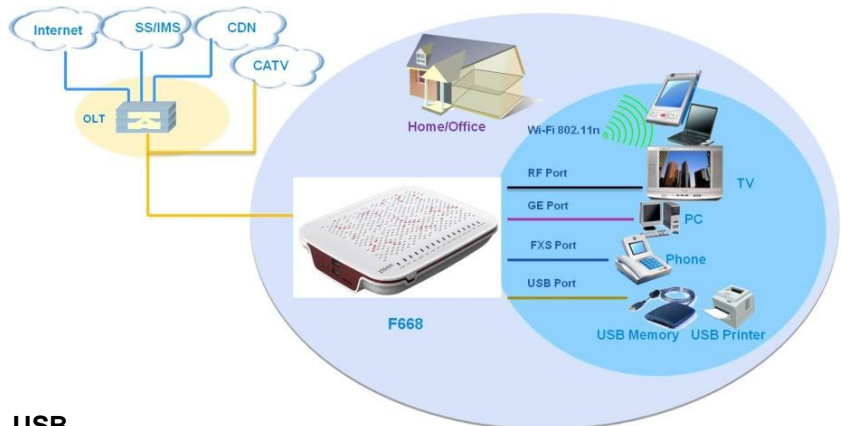
- Frequency: 2.4 GHz
 - IEEE 802.11b/g/n
 - 128 bits WEP data encryption
 - WPA/WPA2 (Wi-Fi Protected Access)
- ### Security
- WPS (Wireless Protected Setup)
 - WMM(Wi-Fi Multi Media)
 - Max 4 Broadcast/hidden SSIDs
 - Max 128 users one SSID

VoIP

- SIP(RFC 3261)/H.248/MGCP
- DTMF Dialing /DTMF Digits /DTMF encoding by RFC 2833
- 5-REN, Balanced Ring, 55V RMS
- Codec: G.711 (μ -law and A-law), G.722, G.729
- 64 ms echo cancellation
- VAD/CNG
- IN-BAND method
- T.38/T.30 FAX
- Caller ID/ Call Waiting/ Call Forwarding/ Call Transfer/ Call Toggle/ Three Way Calling/ Distinctive Ringing

CATV

- F-Type connector
- RF output level of +17 dBmV
- RF Passband: 47 MHz~870 MHz
- Switched on/off by remote control
- RF video over 1550nm wavelength



USB

- File sharing / Profile quick backup
- USB fast recovery
- DLNA DMS
- USB 2.0, full speed, high speed

Router

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

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)
- CATV: One RF interface
- 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, CATV, BATTERY, WLAN, WPS, USB, INTERNET

Electrical Characteristics

- Power input: 12 VDC 1.5 A
- Power consumption: Less than 12W

Physical Characteristics

- Net weight: 580g
- Size: 220 (W) x 180 (D) x 40(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

