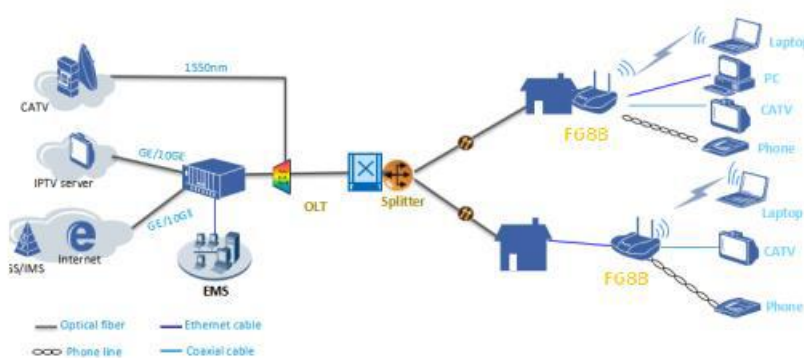


## ZTE ZXHN F688

### DUAL BAND CONCURRENT 11AC ADVANCED GPON GATEWAY

The ZXHN F688 is an ITU-T G.984 and ITU-T G.988 compliant optical network terminal (ONT) that is designed for high-end home users. It is well suited to fiber to the home (FTTH) scenarios and supports desktop mounting. At the network side, it supports 2.488 Gbps downlink and 1.244 Gbps uplink. At the user side, it provides four GE ports, two POTS ports, one USB 2.0 port, one CATV port, and 2x2 802.11n@2.4GHz & 4x4 802.11ac@5GHz concurrent.



### FEATURES

- SC/APC GPON optical interface
- Supports two POTS ports with RJ-11 connector
- Supports 4 10/100/1000Base-T Ethernet ports with RJ-45 connector
- Supports half/full duplex and flow control, auto negotiation or manual configuration
- Supports MDI/MDIX auto-sensing
- 1 CATV interface
- 12 V Power Input Interface. +12 V DC (via external AC/DC adapter: 90–264 V, 50/60 Hz AC input, 12 V DC output )
- 1 USB host interface. Complies with USB 2.0 specifications

### SPECIFICATIONS

GPON
ITU-T G.984 and ITU-T G.988 compatible
Flexible mapping between GEM port and T-CONT
WI-FI
The Wi-Fi function provides an easy, convenient, flexible, and cost-efficient method for users to access the Internet via a wireless LAN network
Supports 2.4GHz (2* 2 MIMO), IEEE802.11b/g/n compliant
Supports 5GHz (4* 4 MIMO), IEEE802.11a/n/ac compliant
Auto and manual channel selection
Auto and manual rate control
Transmission power control
Four SSIDs per frequency band

Maximum 32 users per frequency band
SSID broadcast enabling/disabling
Access control based on MAC address
WPA-PSK, WPA2-PSK, and WPA-PSK + WPA2-PSK security authentication
WPS
WMM
Beamforming
<b>USB</b>
One USB 2.0 host port
Supports file storage and sharing
Supports print sharing
Supports user configuration file fast recovery
Supports USB LTE dongle backup in case of primary Internet connection failure
<b>VOIP</b>
RFC 2617: HTTP Authentication: Basic and Digest Access Authentication.
RFC 2833: RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
RFC 3261: SIP: Session Initiation Protocol
RFC 3262: Reliability of Provisional Responses in the Session Initiation Protocol (SIP)
RFC 3263: Session Initiation Protocol (SIP): Locating SIP Servers
RFC 3264: Offer/Answer Model with Session Description Protocol (SDP)
RFC 3265: SIP Specific Event Notification
RFC 3311: The Session Initiation Protocol UPDATE Method
RFC 3323: A Privacy Mechanism for the Session Initiation Protocol (SIP), For further information see the CLIP/CLIR/CNIP/CNIR document.
RFC 3325: Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks
RFC 3515: The Session Initiation Protocol (SIP) - Refer Method
RFC 3581: An Extension to the Session Initiation Protocol (SIP) for Symmetric Response Routing.
RFC 3842: A Message Summary and Message Waiting Indication Event Package for the Session Initiation Protocol (SIP)
SDP: draft-ietf-mmusic-sdp-new-24.txt
RFC 3891: The Session Initiation Protocol (SIP) "Replaces" Header
RFC 3960: Early Media and Ringing Tone Generation in the Session Initiation Protocol(SIP)
RFC 3966: The Tel URI for Telephone Numbers
RFC 4028: Session Timers in the Session Initiation Protocol (SIP)
Voice Codec: G.711a/u law, G.729, G.722
<b>IPV6 FEATURES</b>
Transparent transmission of IPv6 protocol packets
IPv4/IPv6 dual stack
MLD v1 and MLD snooping
IPv6 address management: <ul style="list-style-type: none"> <li>• SLAAC allocation mode on LAN side</li> <li>• DHCPv6 on LAN side</li> <li>• SLAAC on WAN side</li> <li>• DHCPv6 on WAN side</li> <li>• DHCPv6-PD on WAN side</li> <li>• PPPoE+DHCPv6 on WAN side</li> <li>• PPPoE+SLAAC on WAN side</li> </ul>
<b>SECURITY</b>
Traffic filtering based on UNI, VLAN ID, 802.1p, UNI + 802.1p, and VLAN + 802.1p
Multicast , unicast and broadcast flow attack protection
MAC address limiting based on each UNI or a single ONT
Broadcast packet rate limiting
Anti-DoS attack
MAC filtering
<b>QOS</b>
Traffic rate limiting based on the user port, traffic, and GEM port
Upstream traffic classification based on VLAN ID, VLAN priority level (IEEE802.1D), and Ethernet type (such as IP, PPPoE and ARP/RARP)
Ethernet priority level tagging of the upstream services based on the DSCP value
Ingress rate limiting
Egress shaping

<b>MANAGEMENT</b>	
OMCI management	
Web management	
TR-069 management	
Management via the OLT on the EMS	
Built-in capability for remote management with standards compliance, including the full range of FCAPS functions like supervision, analysis, and maintenance	
UNI loopback detection	
Remote software download, activation, and reboot via the OMCI	
Dual image, version download, update detection, and auto rollback	
<b>ENVIRONMENTAL</b>	
Net dimensions	220mm (W) x 160mm (D) x 35mm (H) (Not including antenna)
Net weight	0.5 kg
Typical power consumption	< 12 W
Noise	Null
Heat dissipation mode	Natural heat dissipation
Power supply	Rated 12 V DC (through the external AC/DC adapter)
Mounting	Desktop- or wall-mount
Operating environment	0°C–40°C
Relative humidity	5%–95%
Atmospheric pressure	70–106 kPa