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# Technical Data Sheet XPON ONU F670S



## Product Information

F670S WiFi5 XPON Router is standards based on CPE designed for advanced triple-play deployments. The compact package contains many features including QoS, VoIP and multicast video support. F670S is ideal for triple-play service deployments in FTTH/FTTB application. Industry standard SIP voice signaling provides reliable voice services. The Ethernet ports can be separated into different services allowing the configuration of dedicated ports for IP video and data. Compliant with standard OMCI definition, F670S is manageable from remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

## Features

- Supports 802.11ac Compatible with 802.11 b/g/n/ac products
- Dual band – for combined wireless speeds of up to 1200bps at 2.4GHz and 5GHz band
- Fiber access and gigabit port provide incredibly fast transfer speeds
- Supports OMCI (ONT Management Control Interface) & TR remote management
- TDM inner transmission, support Native TDM type and CES over XGEM
- Pass though T-CONT-XGEM port to be in progress and multiple-access BDA and QoS manage.
- Easy Setup for quick & hassle free installation

## Specifications

### Key Components

|               |            |
|---------------|------------|
| GPON Chipset  | ZTE        |
| Wi-Fi Chipset | MTK        |
| Flash Memory  | 256M Bytes |
| SDRAM for CPU | 256M Bytes |
| ITU-R K.21    | Support    |
| Interface     |            |

### Interface

1x SC/UPC PON Port  
Standard Compliance ITUG.984.2ClassB+  
Laser safety standardIEC-60825ClassI  
Transmitter 1.244Gbps upstream DFB transmitter in1310nm, with  
>=10dB Extinction Ratio  
Mean launch power in 0.5 to 5dBm range  
Turn on /off time at burst mode<12.8ns  
Receiver 2.488Gbps downstream APD receiverin1490nm, with -8 to  
-28dBm working range  
Isolation(1441-1450nm), (1530-1539nm)>=25dB  
Isolation(1260-1441nm), (1539-1625nm)>=35dB  
TCLayerTypes1to5TCONTasdefinedinG.984.3  
32TCONT,256GEMPorts  
Flexible mapping between TCONT and GEM Ports

### LAN

4 x 10/100/1000Base-TX MDI/MDIX RJ-45 ports (Max 4 ports)  
Compliant with following standards:  
1. IEEE 802.3/802.3u  
2. Hardware based 10/100/1000, full/half, flow control auto negotiation  
3. Non-blocking wire speed reception and transmission  
4. Full duplex IEEE 802.3x flow control and half duplex back-pressure flow control  
5. Broadcast storm protection

6. Automatic address learning, address aging and address migration
7. Integrated address Look-Up Engine, 1 K absolute MAC addresses supported

|                   |                                                                    |
|-------------------|--------------------------------------------------------------------|
| <b>VoIP</b>       | 1*RJ11                                                             |
| <b>USB</b>        | 1*USB                                                              |
| <b>Power Jack</b> | 12V/1.5A                                                           |
| <b>Buttons</b>    | Power Button<br>Reset Button<br>Wi-Fi Button<br>WPS 2.4G/5G button |
| <b>Antenna</b>    | External*2                                                         |

## LEDs

|                |           |
|----------------|-----------|
| <b>Power</b>   | Green/Red |
| <b>PON</b>     | Green     |
| <b>LOS</b>     | Green/Red |
| <b>TEL</b>     | Green     |
| <b>LAN 1-4</b> | Green     |
| <b>WLAN</b>    | Green     |
| <b>WPS</b>     | Green     |
| <b>UBS-1</b>   | Green     |
| <b>UBS-2</b>   | Green     |

## General

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GPON Standards</b> | <p>ITU-T G.987.3 G.989.3 G.984.1/2/3/4</p> <p>Fully ITU-T G.984 compliant framing</p> <p>Support 16 T-CONTs and 128 XGEM Ports</p> <p>Multiple T-CONTs per device</p> <p>Multiple XGEM/GEM Ports per device</p> <p>Support Single T-CONT mode and Multiple T-CONTs mode</p> <p>Flexible mapping between GEM Ports and T-CONT</p> <p>Activation with automatic discovered SN and password in conformance with ITU-T G.984.3</p> <p>AES-128 Decryption with key generation and switching</p> <p>FEC (Forward Error Correction)</p> <p>DBA reporting in status indications in the PLOu, and by piggyback reports in the DBRu (mode 0)</p> <p>802.1p service mapping profile on U/S</p> <p>Mapping of XGEM Ports into a T-CONT with priority queues-based scheduling</p> <p>Support for Multicast XGEM Port</p> <p>Support Dying gasp</p> |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                            |                                                                                  |
|----------------------------|----------------------------------------------------------------------------------|
| <b>Data Rates</b>          | Upstream: 9.95Gbps, Downstream: 9.95Gbps<br>Maximum transmission distance: 20 Km |
| <b>Wireless Standards</b>  | IEEE802.11ac, 5GHz<br>IEEE802.11n, 2.4GHz                                        |
| <b>Operation Frequency</b> | MU MIMO (2x2 for 2.4GHz and 2x2 for 5GHz band)                                   |

|                            |                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Receive Sensitivity</b> | <b>5G:</b><br>11a 6M mode: -92dBm<br>11n(20M MCS7 ) mode: -72dBm<br>11n(40M MCS7) mode: -70dBm<br>11Ac(40M MCS8) mode: -63dBm<br>11Ac(80M MCS9) mode: -60dBm<br><b>2.4G:</b><br>11b 1M mode: -95dBm<br>11g 54Mmode: -74dBm<br>11n(20M MCS7) mode: -72dBm<br>11n(40M MCS7) mode: -70dBm |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                          |                                               |
|--------------------------|-----------------------------------------------|
| <b>Wireless Security</b> | WEP, WPA / WPA2, WPA-PSK/ WPA2-PSK encryption |
|--------------------------|-----------------------------------------------|

## Software Features

|                           |                                                                                                                        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>WAN Type</b>           | Dynamic IP/Static IP / PPPoE                                                                                           |
| <b>DHCP</b>               | Server, Client, DHCP Client List, Address Reservation<br>Support for multiple subnets<br>Static IP lease<br>DHCP relay |
| <b>Quality of Service</b> | WMM, Bandwidth Control                                                                                                 |
| <b>Port Forwarding</b>    | Virtual Server, Port Triggering, UPnP, DMZ, NAT                                                                        |
| <b>VLAN</b>               | 802.1Q tag VLAN, VLAN transparent mode/VLAN translation mode/VLAN trunk mode                                           |
| <b>Access Control</b>     | Parental Control, Local Management Control, Host List, Access Schedule, Rule Management                                |
| <b>Firewall Security</b>  | DoS, SPI Firewall<br>IP Address Filter/MAC Address Filter/Domain Filter<br>IP and MAC Address Binding                  |

|                      |                                                                                                                                                                                                                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>VoIP Features</b> | RJ-11 FXS port for connecting to analog telephones<br>support SIP protocol to deliver voice service(SIP client allocation & Registration)<br>Multiple codec support on ONT ITU-T G.711, G.722, G.729 (A and B)&T.38 Call forwarding,<br>Call waiting, Call block, 3-way conference call, etc. |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                          |                      |
|--------------------------|----------------------|
| <b>Management</b>        | TR069 Access Control |
|                          | Local Management     |
|                          | Remote Management    |
| <b>Internet Protocol</b> | IPv4, IPv6           |

## Environment

|                              |                         |
|------------------------------|-------------------------|
| <b>Operating Temperature</b> | 0°C~40°C                |
| <b>Storage Temperature</b>   | -40°C~70°C              |
| <b>Relative Humidity</b>     | 10%~93%, non-condensing |
| <b>Storage Humidity</b>      | 5%~95%, non-condensing  |



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F6600S