

# OptiXstar B666G-4E4P Datasheet

Master FTTR device

# **Overview**

Huawei OptiXstar B666G-4E4P is a master FTTR device that supports the GPON technology in the upstream direction to realize all-optical gigabit access for enterprises. It supports a photoelectric composite cable to supply power to the slave FTTR device B671G-1E3W, and works with the B671G-1E3W to provide gigabit Wi-Fi coverage for enterprises. It applies to scenarios such as small- and medium-sized enterprises, restaurant, supermarket and campus dormitories.



□ NOTE

The figures in this document may differ from the actual products. The actual products prevail.

# **Features & Benefits**

### **Simplified Deployment**

The master FTTR can replace an ONT, access controller (AC), router, and integrated access device (IAD), simplifying networking, reducing hardware deployment costs, and improving O&M efficiency by 30%.

The master FTTR is powered in a centralized manner, and has a built-in power adapter to supply power to slave FTTRs over photoelectric composite cables.

The master FTTR B666G and the slave FTTR B671G are automatically networked and support plug-and-play.

## Simplified Architecture

Point-to-multipoint networking using photoelectric composite cables and shared feeder optical cables reduce the cabling work by 30%.

An optical socket can be cascaded with extended optical sockets to manage a maximum of 32 slave FTTRs.

### **Ultimate Experience**

Supports network address forwarding for 128k NAT sessions. It supports concurrent access by 300 users.

Supports Wi-Fi roaming with a handover latency about 50 ms (<100ms before V500R022C10 version).

Secure 200 Mbit/s IPSec VPN access and the hardware encryption engine ensure tunnel performance and data security.

# **Intelligent O&M**

Works with NCE remote management and supports app visualized management to implement enterprise network topology visualization and remote Wi-Fi optimization.

# **Hardware Specifications**

Dimensions (H x W x D)	43.6 mm x 442 mm x 220 mm x	Weight	About 2.6kg
AC power supply	100∼240 V AC, 50/60 Hz	Maximum input current	2 A
Static power consumption	11W	Maximum power consumption	16W NOTE The maximum output power of a PoF cable is 135 W.
Network-side port	GPON	User-side port	4 x GE + 4 x POTS + 1 x GPON + 1 x USB
Operating Temperature	–10°C to +40°C	Operating humidity	5%–95% RH, non-condensing

# **Port Parameters**

Port Type	Port Parameters	
Upstream GPON port	<ul> <li>Port type: SC/APC;</li> <li>Class B+;</li> <li>Receiver sensitivity: -27dBm;</li> <li>Overload optical power: -8dBm;</li> <li>Transmission rate: upstream 1.244 Gbit/s, downstream 2.488 Gbit/s</li> <li>Type B Single-Homing Protection</li> <li>Type B Dual-Homing Protection</li> </ul>	
Downstream GPON port	<ul> <li>Port type: XC/UPC</li> <li>Receiver sensitivity: -23 dBm</li> <li>Overload optical power: -8 dBm</li> <li>Transmission rate: 2.488 Gbit/ downstream and 1.244 Gbit/s upstream</li> </ul>	
LAN port	<ul> <li>RJ-45 port</li> <li>10 Mbit/s, 100 Mbit/s, or 1000 Mbit/s autonegotiation</li> <li>Standard compliance: IEEE802.3</li> </ul>	
TEL port	<ul> <li>Port type: DB68</li> <li>Transmission rate: 64 Kbit/s</li> <li>Standards compliance: ITU-T G.552</li> </ul>	
USB	USB 2.0	

# **Product Functions**

#### Intelligent O&M

- OMCI/Web UI/TR069 management
- Call emulation test, circuit test, and loop line test
- PPPoE and DHCP emulation tests

### Supports the following functions with NCE:

- Remote management and maintenance
- Local WeFTTR Assistant APP\*\* management
- WeFTTR User APP\*\* management
  - Installation guide
  - Visualized network topology
  - One-click health check
  - Wi-Fi configuration\*\*\*
  - Timed Wi-Fi on/off\*\*\*
  - Blacklist and Internet access control

### Layer 3 features

- PPPoE client/static IP address/DHCP server/DHCP client
- IPv6/DHCPv6 Server/DHCPv6 client
- DDNS/DNS
- Static route
- NAT/NAPT/static one-to-one address translation
- DMZ/Port Mapping/Port Tigger
- ALG/UPnP/ARP

#### Voice

- Supports SIP/H.248.
- Supports G.711A/u, G.722, and G.729.
- Supports T.38/transparent transmission.

#### **VPN**

- L2TP VPN
- VXLAN tunnel
- IPSec encryption

#### QoS

- Ethernet port rate limitation
- 802.1p priority
- SP/WRR/SP+WRR
- · Broadcast packet rate limitation

#### Layer 2 management

- VLAN management
- MAC bridge management
- Loop detection
- DHCP Option82
- PITP
- BPDU transparent transmission

#### Multicast

- IGMP v2/v3 snooping
- IGMP proxy
- MLDv1/MLDv2 snooping
- Multicast emulation
- GPON interoperation multicast

### Security

- SPI firewall
- IPv4/IPv6 firewall
- Anti-DoS attack
- MAC/IP/URL address filtering
- Static MAC addresses binding
- Local portal authentication
- Authentication-free whitelist

## Enterprise network

- Gigabit optical access and all-optical Wi-Fi coverage for enterprises
  - No electromagnetic interference and low latency
  - Visualized management of the enterprise network topology
  - Automatic Wi-Fi channel selection under the same master FTTR device
  - Supports Wi-Fi roaming with a handover latency about 50 ms (<100ms before V500R022C10 version) (802.11k/802.11v)\* under the same master FTTR device

<sup>\*:</sup> User terminals must support 802.11k/802.11v.

<sup>\*\*:</sup> Huawei can provide the basic mobile app for Carrier. Carrier can develop and customize apps based on the SDK provided by Huawei.

<sup>\*\*\*:</sup> The B666G does not support Wi-Fi, but you can configure the Wi-Fi of the B671G on the B666G. That is, after you configure the Wi-Fi parameters on the B666G, the Wi-Fi configuration automatically overwrites the Wi-Fi configuration on the B671G.

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