

LG6851F



- 5G CPE
- Wi-Fi 7
- Smart O&M

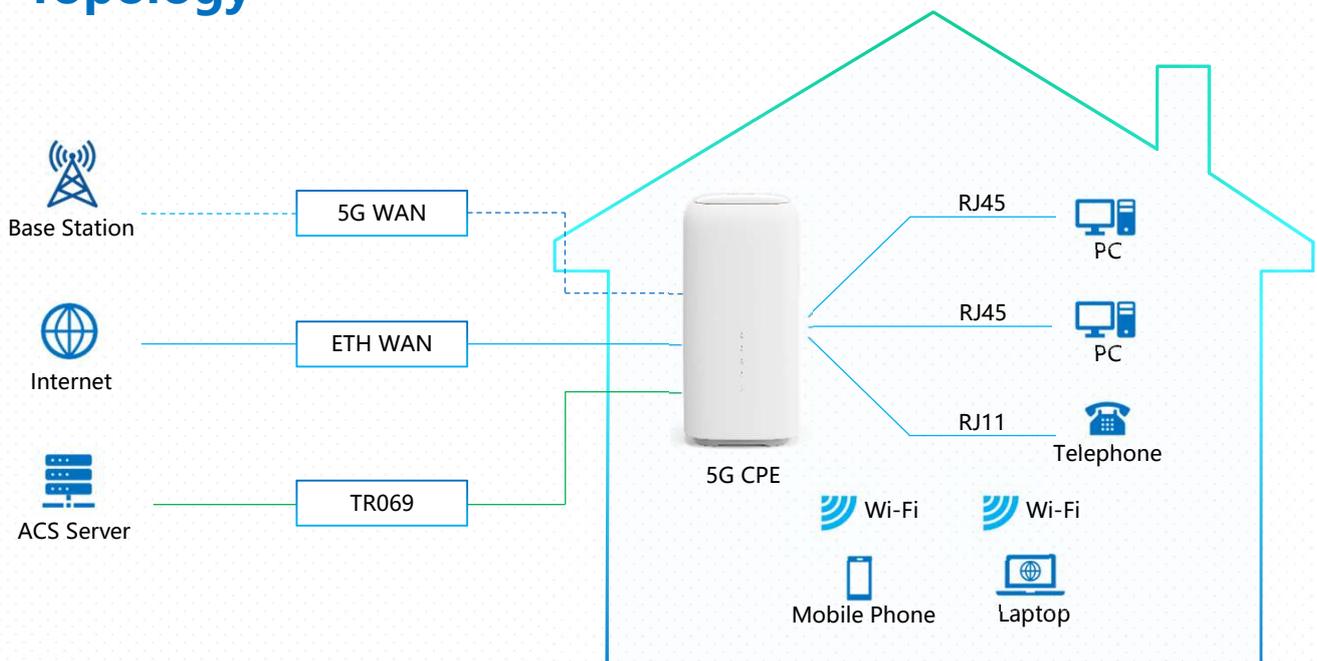
Physical Specification

Dimensions (W*D*H)	108*108*226mm
Weight	About 850g
Color	White
Operating Temperature	-5°C~45°C
Storage Temperature	-20°C~70°C
System Power Supply	DC 12V, 2.5A
Power Adapter input	AC 100~240V, 50~60Hz
System Power	< 30W
Buttons	Power/WPS/Reset
NNI Ports	5G NR or 4G LTE or 2.5G WAN
UNI Ports	2*2.5GE + 1*POTS + dual-band Wi-Fi 7
Memory	2GB DDR , 4GB Flash
LED Indicators	Power/5G/4G/WLAN/WPS/Phone

Product Overview

- LG6581F is a high-performance Customer Premise Equipment for 5G/LTE network access. It is mainly used in home or small office scenarios where no fiber coverage, providing various services such as family network coverage, equipment monitoring, wireless routing etc.
- LG6581F supports 5G NR, 4G FDD-LTE, and 4G TDD-LTE mobile network standard. It is adapt to different network deployments.
- LG6581F supports 802.11a/b/g/n/ac/ax and the latest 802.11be (Wi-Fi7) protocol.

Topology



RF Interface

5G NR

- Support 5G NR (3GPP Release 16) Sub-6G
- 5G NR Bands:
n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n75/n77/
n78
- 5G DL 4*4 MIMO:
n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/78
- Peak throughput: DL 7.01Gbps/UL 2.5Gbps

4G LTE

- LTE Category: Cat 19
- Support TDD-LTE/FDD-LTE
- LTE-FDD B1/B3/B5/B7/B8/B20/B28/B32
- LTE-TDD B38/B40/B41/B42/B43
- 4G DL 4*4 MIMO:
B1/B3/b7B8/38/B40/B41/B42/B43
- Peak throughput: DL 1.6Gbps/UL 316Mbps

RF Extensions

- Support NR 4CC CA
- Support ENDC
- Support DSS
- Support two 5G antenna extension ports

SIM Slot

SIM Slot

- 4FF SIM card (Nano-SIM) format
- Support carrier SIM lock
- Support SIM card hot swap

Lock

- Locking cells and frequency points

Message

- Support sending and receiving short messages

UNI Interface

Ethernet Port

- 1*2.5GE for LAN/WAN port + 1*2.5GE for LAN port
- WAN/LAN switch
- RJ45 interface
- 10/100/1000/2500M auto-negotiation
- MDI/MDIX auto-sensing
- IEEE 802.3/802.3u

Phone Port

- 1*Phone port(RJ11)
- Support SIP Protocol
- Support CS voice communication
- Support VoLTE
- Support VoNR

Wi-Fi Interface

- IEEE 802.11 b/g/n/ax/be (2.4GHz)
- IEEE 802.11 a/n/ac/ax/be (5GHz)
- Dual-band Wi-Fi 7 : BE7200, 2.4G(4*4 MIMO) and 5G(4*4 MIMO)
- Encryption: WEP, AES, and TKIP + AES
- Security mode: Open, WEP, WPA2-PSK, WPA/WPA2-PSK, WPA3
- Support multi SSID and guest SSID
- Support changing SSID and password
- Press the WPS button to quickly connect
- 2.4GHz&5GHz dual-band auto-selection
- 4 internal 2.4G Wi-Fi antennas; 4 internal 5G Wi-Fi antennas
- Support DBDC
- Support maximum of 128 connected stations

Product Function

Multi-Services

- Multi services: Internet, voice
- Flexible UNI connection modes: wire (GE/Phone) + wireless (Wi-Fi)

Smart Interconnection

- Easy to access two network: 5G/4G LTE
- Support two 5G network mode: NSA/SA
- Easy to connect to ACS by TR069
- Wi-Fi 2.4GHz&5GHz dual-band auto-selection
- IPv4/IPv6 auto-negotiation
- Different LED clearly indicate network status

Software Update

- Web UI update
- TR069 update
- FOTA update

Product Function

Device Management

- Web UI
- TR069 management
- Mobile APP (could be customized)

APN Setting

- Support default APN (customized)
- Set APN username/password/IP mode

TR069

- Support HTTP/HTTPS format
- Upload/download the ACS specified files, Download CPE configuration files
- Configure & query parameters
- Remote upgrade

Diagnosis

- Ping diagnosis
- Traceroute diagnosis
- Export operation diagnosis logs

L3 Functions

- Support PPPoE/DHCP/static IP config
- Support IPv4, IPv6, IPv4/IPv6 dual stack
- DNS RELAY and NAT
- ALG: H.323/SIP/RTSP/L2TP/PPTP/FTP
- Support PPTP/L2TP VPN/IPSec VPN

Security Services

- Firewall service: firewall switch, DMZ, UPnP, port forwarding, IP MAC binding
- ACL filter: Mac/IP address filter, Port/URL filter, Wi-Fi black/white list
- Wi-Fi authentication

Product Certification

Certification

- Support CE Certification
- Support Wi-Fi Alliance Certification

Materials

- Meet RoHS requirements