ZYXEL

EMG6765-Q10A

AC2200 Gigabit Ethernet MoCA Gateway

The Zyxel EMG6765-Q10A is an AC2200 Gigabit Ethernet MoCA Gateway with MoCA 2.0 features that works as a wired backbone for reliable WiFi extensions. The EMG6765-Q10A enables concurrent data transfer rates of 450 Mbps* at 2.4 GHz and 1733 Mbps* at 5 GHz for users to enjoy higher speeds across greater distances throughout the entire home for maximum wireless coverage. The device also features TR-069 standard management specifications for service providers to manage and configure client devices remotely without the need for any end-user intervention.

Benefits

High power for ultimate coverage

The Zyxel EMG6765-Q10A optimizes the power of home networks and ensures its coverage reaches every corner in the house. High-power amplifiers and high-gain antennas for the maximum WiFi coverage bring ultimate range and performance that users expect from their networked devices.

Speeds of up to 450 Mbps* at 2.4 GHz and 1733 Mbps* at 5 GHz

True dual-network design for optimized HD media and excellent HD media experience for mobile devices and desktops

MoCA support as the Gigabit-grade backbone for whole-home networking coverage

Auto provisioning and remote management through TR-069

802.1q, port-based VLAN and DHCP options support triple-play services

2 USB 3.0 Host ports deliver Samba File Service and DLNA media streaming from external USB disks or hard drives

WPS button for easy setup
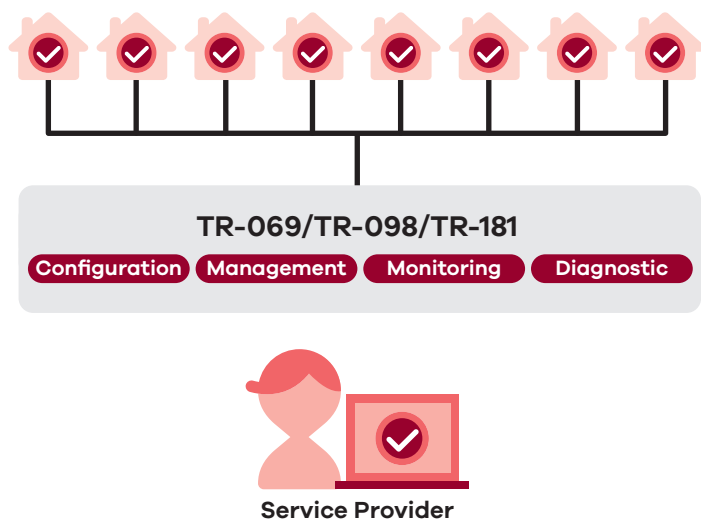
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MoCA 2.0 bonded Gigabit speed

The Zyxel EMG6765-Q10A with MoCA 2.0 has been designed as a wired backbone for reliable WiFi extensions. MoCA 2.0 Bonded is the preferred solution for extending wireless coverage in multilevel homes.

802.1q, port-based VLAN and DHCP options support triple-play services

The built-in VLAN and DHCP features of the Zyxel EMG6765-Q10A enable service providers to deploy multimedia services based on triple-play offerings for better network efficiency and productivity to meet the need of residential users.

Auto provisioning and remote management through TR-069/TR-098/TR-181

The Zyxel EMG6765-Q10A incorporates the TR-069 standard management specifications for service providers to remotely manage and configure devices without any end-user intervention. The feature offers a true "plug-and-play" experience while reducing deployment complexity to help saving operating and maintenance costs for service providers.

TR-069/TR-098/TR-181

Configuration   Management   Monitoring   Diagnostic

Service Provider

Easy administration for two-level configuration

The Zyxel EMG6765-Q10A provides a two-level administration design, so service providers can use two different privilege levels to complete critical device configurations. Service providers can manage and configure devices with full privilege and parameters, while end users are only granted with partial administration rights for basic, user-friendly configuration options such as wireless scheduling and SSID setting.
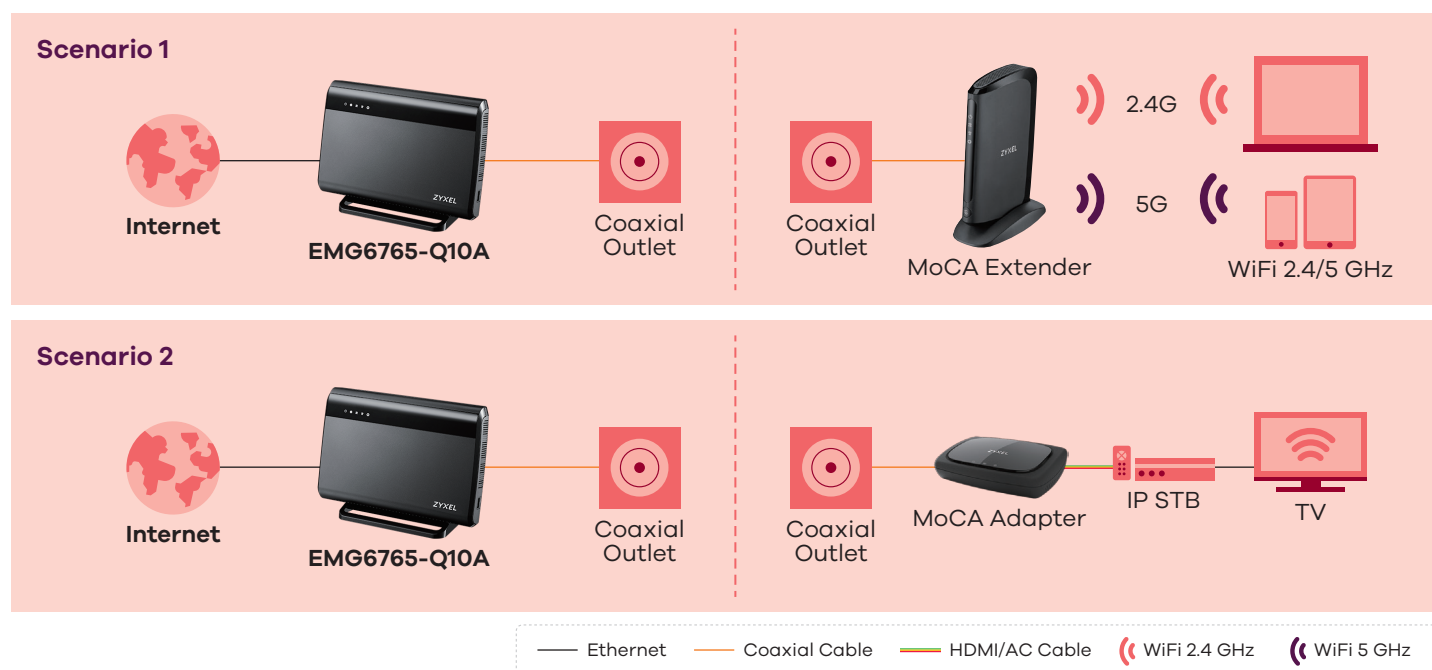
Optimized concurrent dual-band wireless for different applications

The Zyxel EMG6765-Q10A AC2200 Gigabit Ethernet MoCA Gateway features 802.11ac technology to provide the ultimate solution for both speed and coverage performance. With 802.11ac wireless data rates of up to 1733 Mbps*, the EMG6765-Q10A provides stable, reliable wireless connections for high-speed data and multimedia applications. The 802.11ac technology empowered the device to eliminate dead zones and to extend coverage while retaining backward compatibility with any WiFi certified device. Users can browse the Web on the 2.4 GHz band while watching HD video or play online games over the 5 GHz band smoothly while others at home are browsing the Web or checking emails.
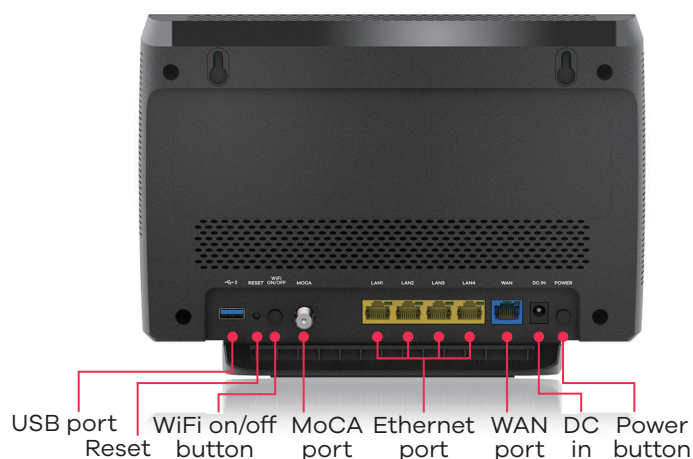
Application Diagram

Scenario 1

Internet — EMG6765-Q10A — Coaxial Outlet | Coaxial Outlet — MoCA Extender — 2.4G / 5G — WiFi 2.4/5 GHz

Scenario 2

Internet — EMG6765-Q10A — Coaxial Outlet | Coaxial Outlet — MoCA Adapter — IP STB — TV

—— Ethernet   —— Coaxial Cable   —— HDMI/AC Cable   ((WiFi 2.4 GHz   ((WiFi 5 GHz

Front Panel

LED indicators

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Rear Panel

USB port   Reset   WiFi on/off button   MoCA port   Ethernet port   WAN port   DC in   Power button

Specifications

System Specifications

Wireless Standard
- 802.11 b/g/n 2.4 GHz
- 802.11 a/n/ac 5 GHz

Wireless Transfer Rates
- Transmit:
    - 450 Mbps* for 2.4 GHz
    - 1733 Mbps* for 5 GHz
- Receive:
    - 450 Mbps* for 2.4 GHz
    - 1733 Mbps* for 5 GHz

MoCA Transfer Rate and Band
- PHY data rate:
    - 700 Mbps (baseline)
    - 1400 Mbps (bonded)
    - Backward compatible with MoCA 2.0/1.1/1.0
- Frequency range:
    - 1350 to 1675 MHz (D-high SKU)
    - 1125 to 1675 MHz (Full-D SKU)

Wireless Security
- WPA2, WPA2-PSK

WLAN Features
- Auto channel selection
- WiFi Multimedia (WMM)
- Wireless scheduling
- Wireless output power management
- Multiple SSID up to 4
- WiFi Protected Setup (WPS)
- Intra-BSS traffic block
- MAC address filtering

Firewall
- Stateful Packet Inspection (SPI)
- Denial-of-Service (DoS) attack prevention
- ICMP blocking

Routing
- IPv4/IPv6
- NAT
- Port forwarding
- WAN connection type: DHCP, PPPoE
- DHCP option 60/121/125
- DHCP server on LAN
- IGMP v1/v2
- IGMP proxy
- Dynamic DNS

VPN Pass-through
- PPTP
- L2TP
- IPSec

VLAN
- 802.1q tag/tag based VLAN
- VLAN to ETH port mapping
- Bridged/routed VLAN support

Management
- Bandwidth management QoS
- Web GUI (HTTP/HTTPS)
- TR-069/TR-098/TR-181
- SNMP v1/v2c & MIB II
- Firmware upgrade through GUI/TR-069
- 2-tier level access and administration
- Customized factory default

Other
- Content filter
- Parental control
- UPnP
- USB media sharing

Hardware Specifications
- WAN:
    - One 10/100/1000 Mbps Ethernet RJ-45 port with auto MDI/MDIX support
- LAN:
    - Four 10/100/1000 Mbps Ethernet RJ-45 ports with auto MDI/MDIX support
- LED indicators:
    - Power
    - Internet
    - WLAN for 2.4 GHz/WPS
    - WLAN for 5 GHz/WPS
    - MoCA
    - WAN (on RJ-45)
    - LAN 1-4 (on RJ-45)
- Internal antennas
- Button:
    - Power On/Off
    - Wireless On/Off
    - WPS
    - Reset
- Power: 12V DC, 3A
- Power consumption: 33 Watts max.

Physical Specifications
- Item dimensions (WxDxH): 260.4 x 168.6 x 43.5 mm (10.25" x 6.64" x 1.71")
- Item weight: 688 g (1.52 lb.)
- Packing dimensions (WxDxH): 321 x 202 x 106 mm (12.64" x 7.95" x 4.17")
- Packing weight: 1218 g (2.69 lb.)

Environmental Specifications

Operating Environment
- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 10% to 90% (Non-condensing)

Storage Environment
- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 10% to 95% (Non-condensing)

Certification
- EMC: FCC, IC

Package Contents
- Wireless router
- Power adapter
- Ethernet cable
- Quick start guide

* The maximum wireless data transfer rate is derived from IEEE Standard 802.11 specifications. Actual data transfer rate will vary from network environment including: distance, network traffic, building site materials/construction, interference from other wireless devices, and other adverse conditions.

For more product information, visit us on the web at www.zyxel.com

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