
MG21/21E Datasheet

Connectivity is critical for any organization that depends on reliable internet access in order to function. Wireless WAN connectivity options, such as cellular networks, serve as a reliable backup internet uplink in the event of a primary uplink failure.

The MG21 cellular gateway simplifies the path to wireless WAN connectivity and makes cellular a viable uplink option many networks. MG21 acts as a gateway to cellular networks, by converting LTE signal from a cellular provider to an ethernet handoff, which can be used as an internet uplink for a variety of use-cases.



Features

Highlights

- 300 Mbps CAT 6 LTE Integrated modem
- Supports 2 separate gateway connections
- Small form factor
- PoE or DC powered
- IP67 rating

Management

- Manageability from the Cisco Meraki dashboard
- Self-configuring Cellular Gateway
- Automatic firmware upgrades with scheduling control

Remote Diagnostics

- Email, SMS and Mobile push notification alerts
- Ping, traceroute, cable testing, and link failure detection with alerting
- Remote packet capture
- Combined event and configuration change logs with instant search

Use Cases

Note that the following use-cases refer to using Meraki MX appliance using the MG21 as a WAN uplink. However, the use-cases also apply to non-Meraki devices.

Antenna placement where cellular coverage is best: Signal strength is key for cellular performance. The MG21 makes cellular a viable option in situations the best location for the MX is not always the best for cellular signal. The separation of cellular antenna and MX expands cellular options for all networks, particularly for mid-range MXs mounted in a data center.

Primary WAN

In areas where wired internet services are not available, the MG21 provides a simple, viable option for wireless WAN connectivity.

Secondary WAN for Failover

An MX's secondary WAN interface connected to an MG21 may use the cellular network in the event of a primary uplink failure.

Secondary WAN for SD-WAN

An MX with an MG21 as a secondary WAN uplink may use the cellular network to establish VPNs for SD-WAN.

High Availability Uplink

The MG21 can be used as either a primary or secondary internet uplink for MX HA topologies. Its two LAN ports allow the MXs to share access to the same cellular network.

Configuration

The basic initial configuration of the MG21/MG21E is just as simple as any other Meraki product. The links below provide additional information and instructions relating to each step in getting the device setup and configured for the first time.

1. [Claim the device to an Organization on the Meraki Dashboard](#)
 1. If a Dashboard Organization does not yet exist, [Create one](#)

2. [Add the device to a Dashboard Network](#)
 1. If a Network does not yet exist, [Create one first](#)
3. Insert the SIM card for cellular connectivity
4. Physically connect power to the device
 1. Connect the power adapter or ethernet connection for PoE
5. Connect to the Local Status Page of the MG
 1. Plug a laptop into the LAN port on the MG
 2. LAN 1 will provide DHCP for your client device in the subnet 192.168.100.0/24
 3. In an internet browser, navigate to 192.168.100.1
 4. Configure static IP and APN if necessary on the Configure tab
6. Allow the device to completely check-in and perform any initial firmware upgrades
7. Finish configuring the device from the Meraki Dashboard

Technical Breakdown

Physical Specifications

Models	MG21	MG21E
Dimensions (w x d x h)	160.45 x 160.45 x 34.45mm	165.7 x 160.45 x 34.45mm
Weight(without accessories)	497g	489g
Power Supply	12V/1A, 48-57V DC/0.35A	12V/1A, 48-57V DC/0.35A
Power Load	10 Watt Maximum (PoE 802.3AF)	10 Watt Maximum (PoE 802.3AF)
Operating Temperature	4°F to 113°F (-20°C to 45°C)	4°F to 113°F (-20°C to 45°C)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing

Interfaces

LAN Interfaces	x2 GbE
WAN Interfaces	x1 CAT 6 LTE cellular modem

Cellular

	North America	Worldwide
LTE Bands	2, 4, 5, 12, 13, 17, 29	1, 3, 5, 7, 18, 19, 20, 26, 28
Standard	300 Mbps CAT 6 LTE	300 Mbps CAT 6 LTE
Certifications	PTCRB (US), RCM (ANZ, APAC), GCF (EU)	PTCRB (US), RCM (ANZ, APAC), GCF (EU)

Accessories

Accessory	Description
MA-PWR-30W	Standard power adapter
MA-INJ-4	Gigabit 802.3at PoE injector