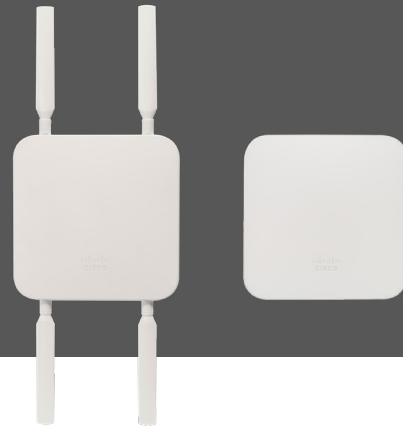


# MG41 Series

## Cellular Gateways



### Overview

The Meraki MG41, part of the MG cellular gateway family, enables high-speed, always-on reliable network connectivity for business-critical operations and a hybrid workforce through cellular deployments with gigabit primary or backup cellular uplinks.

### MG41: Superfast, resilient connectivity anywhere

MG41 can instantly provision primary cellular connectivity across thousands of sites at once without waiting on broadband or any change in infrastructure, enabling faster business expansion.

Deliver primary gigabit connectivity with MG41 or pair with Meraki MX and SD-WAN to allow for the optimal bandwidth management needed for today's cloud-first organizations.

With gigabit-level backup cellular connectivity, businesses can rely on MG41 for a consistent experience 24/7/365 to increase business uptime and network resilience.

MG41 allows businesses to confidently deploy primary gigabit cellular at sites where there's no broadband coverage, the carrier coverage is initially unknown, or there's a varying level of availability and network reliability from multiple regional carriers.

The dual SIM gives the flexibility to switch to a better performing carrier network through auto-SIM failover or switch to the other carrier when either of the SIM reaches the data cap.

### Product highlights

- Built-in CAT 18 connectivity
- Supports two separate downstream router connections
- Small form factor
- PoE or DC powered
- IP67 rating
- Manageability from the Cisco Meraki dashboard
- Self-configuring cellular gateway
- Automatic firmware upgrades with scheduling control
- Extensive API support
- 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
- Self-configuring, plug-and-play deployment
- Sleek, low profile design
- Built-in CAT 6 LTE connectivity
- IP67 rated for environments of all types

## Models: MG41-HW

<b>Recommended use cases</b>	Wired uplink to MX or any third-party router
<b>Recommended downstream devices</b>	Up to 2 devices
<b>LAN Interfaces</b>	2
<b>PoE IN Port</b>	2x 802.3af compatible
<b>Dimensions (w x d x h)</b>	168 mm x 168 mm x 35 mm
<b>Weight (without accessories)</b>	670 g
<b>Power supply</b>	12V/1A, 48-57V DC/0.35A
<b>Operating temperature</b>	-22°F to 122°F (-30°C to 50°C)
<b>Humidity</b>	5% to 95% non-condensing

## Models: MG41E-HW

<b>Recommended use cases</b>	Wired uplink to MX or any third-party router
<b>Recommended downstream devices</b>	Up to 2 devices
<b>LAN Interfaces</b>	2
<b>PoE IN Port</b>	2x 802.3af compatible
<b>Dimensions (w x d x h)</b>	168 mm x 168 mm x 35 mm
<b>Weight (without accessories)</b>	670 g
<b>Power supply</b>	12V/1A, 48-57V DC/0.35A
<b>Operating temperature</b>	-22°F to 122°F (-30°C to 50°C)
<b>Humidity</b>	5% to 95% non-condensing

# Features

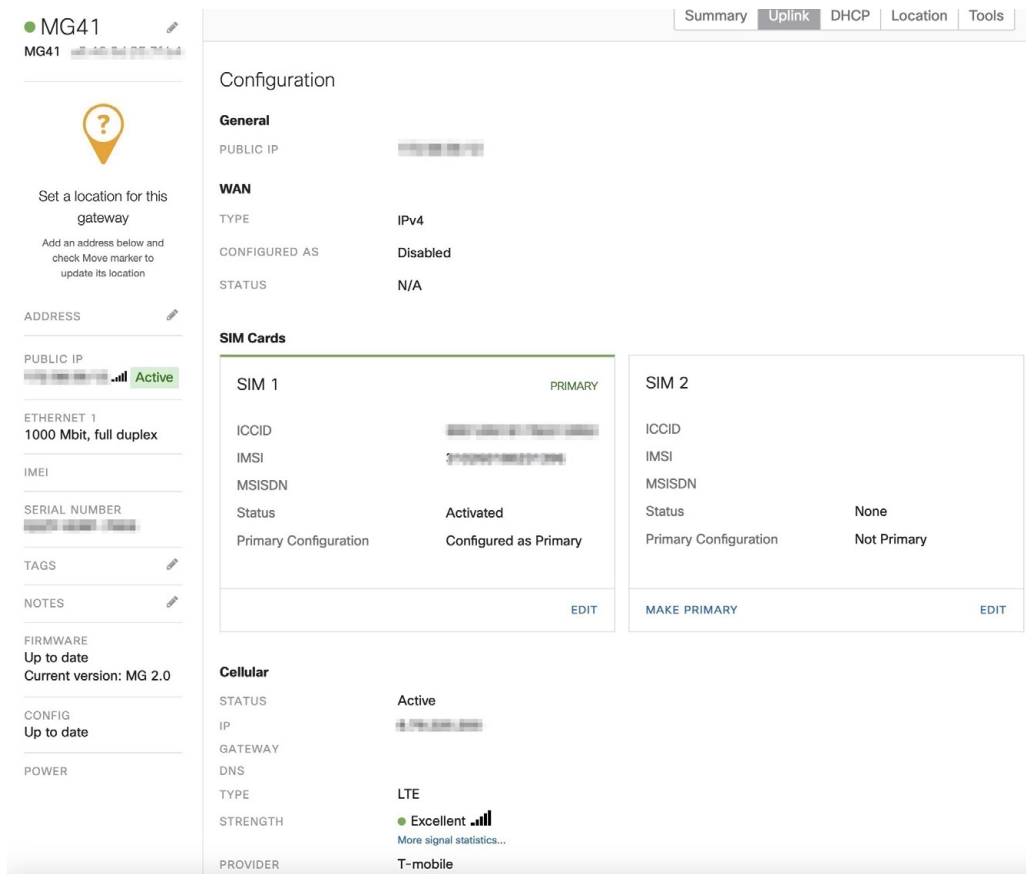
## Self-configuring, cellular primary

If a certified carrier SIM card is inserted, the MG41 brings up the cellular connection and automatically connects to the Meraki cloud, downloads its configuration, and joins your network.

## Industry-leading cloud management

Meraki's award-winning cloud-management architecture unifies LAN and management under a web-based dashboard

and scales easily from small to large multi-site deployments with tens of thousands of devices. The Meraki dashboard provides intuitive yet powerful role-based administration, firmware updates, configuration changes, email alerts, and easy-to-audit change logs.



The screenshot shows the Meraki dashboard for an MG41 device. The left sidebar contains various status indicators: a location pin icon with a question mark and the text "Set a location for this gateway", "ADDRESS", "PUBLIC IP" (with a green "Active" status), "ETHERNET 1" (1000 Mbit, full duplex), "IMEI", "SERIAL NUMBER", "TAGS", "NOTES", "FIRMWARE" (Up to date, Current version: MG 2.0), "CONFIG" (Up to date), and "POWER". The main content area is titled "Configuration" and has tabs for "Summary", "Uplink", "DHCP", "Location", and "Tools".

**Configuration**

**General**

PUBLIC IP [REDACTED]

**WAN**

TYPE: IPv4  
CONFIGURED AS: Disabled  
STATUS: N/A

**SIM Cards**

SIM 1	SIM 2
ICCID: [REDACTED]	ICCID: [REDACTED]
IMSI: [REDACTED]	IMSI: [REDACTED]
MSISDN: [REDACTED]	MSISDN: [REDACTED]
Status: <b>Activated</b>	Status: <b>None</b>
Primary Configuration: <b>Configured as Primary</b>	Primary Configuration: <b>Not Primary</b>
<a href="#">EDIT</a>	<a href="#">MAKE PRIMARY</a> <a href="#">EDIT</a>

**Cellular**

STATUS: **Active**

IP: [REDACTED]

GATEWAY: [REDACTED]

DNS: [REDACTED]

TYPE: **LTE**

STRENGTH: **Excellent** [Signal strength icon]

PROVIDER: **T-mobile**

### Local Status Page (LSP)

Connection	Configure	Ethernet	Cellular Status
------------	-----------	----------	-----------------

Cellular Status	
IMEI	356299100340684
Temperature	29 °C
SIM1	Status: Active ICCID: 89302 [REDACTED] IMSI: 30274 [REDACTED]
SIM2	Status: Standby
Network Selection Mode	Automatic
Network	Rogers Wireless
Roaming Status	Home
MCC	302
MNC	720
TAC	30118
Data Session	Connection: Connected MTU: 1460 IPv4 Address: 25.121.233.103 IPv4 DNS: 64.71.255.255, 64.71.255.255
Radio Access Technology (RAT)	LTE
Bands	2 (PCC), Unknown (SCC0)
Reference Signal Received Power (RSRP)	-105 dBm
Reference Signal Received Quality (RSRQ)	-18 dBm

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## Local Status Page (LSP)

Connection
Configure
Ethernet
Cellular Status

### Cellular Settings

SIM Selection  SIM1  SIM2

Use custom data session setting for SIM1

APN

IP Type  IPv4  IPv6  IPv4v6

Authentication  None  PAP  CHAP  PAP/CHAP

Username

Password

Use custom data session setting for SIM2

### Safe Mode

In Safe Mode Port 1 is Configured as a WAN Port. This allows the cellular gateway Port 1 to be plugged into a switch,router and other uplink to access Meraki Cloud even when the cellular network is inaccessible.

Enable Safe Mode

### Web proxy

HTTP will be used for the device to communicate with the Cisco Meraki cloud if UDP communication is blocked

Use a proxy? No

Save

### Cellular Settings

Override SIM Selection

SIM Selection  SIM1  SIM2

Connection
Configure
Ethernet
Cellular Status

### Ethernet configuration

Use this page to configure physical link settings on the Ethernet ports.

Port Name	Enabled	Link Negotiation
LAN 1	<span style="border: 1px solid #ccc; padding: 2px;">enabled</span>	<span style="border: 1px solid #ccc; padding: 2px;">Auto (10/100/1000Mbps)</span>
LAN 2	<span style="border: 1px solid #ccc; padding: 2px;">enabled</span>	<span style="border: 1px solid #ccc; padding: 2px;">Auto (10/100/1000Mbps)</span>

Save

# MG41 specifications

## Performance

1.2 Gbps (DL)/ 150 Mbps (UL) Cat 18 integrated cellular

## Interfaces

2x PoE IN

LAN interfaces: 2 x GbE

1x CAT18 integrated cellular

## Monitoring and reporting

Throughput, connectivity monitoring

Org-level change logs for compliance and change management

## Environmental specifications

Power: 12V/1A, 48-57V DC/0.35A

Operating temperature: -22°F to 122°F (-30°C to 50°C)

Humidity: 5 to 95% non-condensing

Desktop or wall mount or ceiling mount  
(all standard mounting hardware included)

## Remote diagnostics

Live remote packet capture

Real-time diagnostic and troubleshooting tools

## Management

Managed via the web using the Meraki Cloud Controller

Single pane of glass management of wired and wireless networks

Zero-touch remote deployment (no staging needed)

Automatic firmware upgrades and security patches

Centralized policy management

Org-level two-factor authentication and single sign-on

Role based administration with change logging and alerts

## Integrated cellular

Support for major bands: 2, 4, 5, 12, 13, 14, 48, 66, 71  
\*Refer to the datasheet for the full list

1.2 Gbps Cat 18 LTE

Additional regulatory information:  
PTCRB (U.S.), RCM (ANZ, APAC), GCF (EU)

## Supported UICC/SIM

2x external SIM cards

## Regulatory

FCC (US)

CB (IEC)

CISPR (Australia/New Zealand)

PTCRB (North America)

RCM (Australia/New Zealand, Asia Pacific)

GCF (EU)

## Warranty

Full lifetime hardware warranty with next-day advanced replacement included.

## Included in box

MG41	1x MG41-HW 1x mounting plate and screw set
MG41E	1x MG41E-HW 1x mounting plate and screw set 4x dipole antennas

## Accessories

MA-PWR-30W-XX	Standard power adapter. Regional plugs per SKU.
MA-INJ-4	Gigabit 802.3at PoE injector
MA-ANT-C1-A	Dipole Antenna pair included with MG41E
MA-ANT-C1-B	Patch Antenna for the MG41E

## Cellular

<b>MG41-HW &amp; MG41E-HW</b>	
<b>LTE bands</b>	B1 (2100) B2 (1900) B3 (1800) B4 (1700) B5 (850) B7 (2600) B8 (900) B12 (700ac) B13 (700c) B14 (700PS) B17 (700b) B18 (800) B19 (800) B20 (800DD) B25 (1900) B42 (TDD 3500) B38 (TDD 2600) B40 (TDD 2300) B43 (TDD 3600) B26 (US 850 Ext) B28 (700 APAC) B29 (US 700de Lower) B39 (TDD 1900) B41 (TDD 2500) B30 (2300 WCS) B66 (AWS-3) B32 (1500) B46 (TDD 5200) B48 (3600) B71 (600)
<b>UMTS bands</b>	B1 (2100) B2 (1900) B8 (900) B4 (AWS) B5 (850)
<b>LTE category</b>	CAT 18 LTE-A PRO
<b>Certifications</b>	Ongoing - PTCRB (US), RCM (ANZ, APAC), GCF (EU)
<b>Tested carriers</b>	AT&T (United States), Verizon (United States), Rogers (Canada), Telus (Canada), Bell (Canada), Deutsche Telekom (Germany), Sunrise (Switzerland), Vodafone (NZ, UK, Germany, Ireland), Telstra (Australia), Optus (Australia), NTT docomo (Japan), KDDI (Japan)

## Cellular

Carrier aggregation	Global Carriers
<b>2CA</b>	CA_1A-3A, CA_1A-5A, CA_1A-7A, CA_1A-8A, CA_1A-18A, CA_1A-19A, CA_1A-20A, CA_1A-26A, CA_1A-28A, CA_1A-32A, CA_1A-38A, CA_1A-40A, CA_1A-41A, CA_1A-42A, CA_[2A]-[4A], CA_[2A]-5A, CA_[2A]-7A, CA_[2A]-12A, CA_[2A]-28A, CA_[2A]-46A, CA_[2A]-48A, CA_[2A]-[66A], CA_[2A]-71A, CA_3A-5A, CA_3A-7A, CA_3A-8A, CA_3A-19A, CA_3A-20A, CA_3A-26A, CA_3A-28A, CA_3A-32A, CA_3A-38A, CA_3A-40A, CA_3A-42A, CA_[4A]-5A, CA_4A-7A, CA_[4A]-12A, CA_[4A]-28A, CA_[4A]-46A, CA_5A-7A, CA_7A-8A, CA_7A-12A, CA_7A-20A, CA_7A-28A, CA_7A-42A, CA_8A-38A, CA_8A-40A, CA_8A-42A, CA_12A-[66A], CA_20A-32A, CA_20A-38A, CA_20A-40A, CA_20A-42A, CA_26A-[41A], CA_28A-40A, CA_28A-42A, CA_39A-41A, CA_40A-42A, CA_46A-[66A], CA_48A-[66A], CA_[66A]-71A, CA_1A-1A, CA_[2A]-[2A], CA_3A-3A, CA_[4A]-[4A], CA_7A-7A, CA_40A-40A, CA_42A-42A, CA_48A-48A, CA_[66A]-[66A], CA_[2C], CA_3C, CA_7B, CA_7C, CA_8B, CA_12B, CA_38C, CA_39C, CA_40C, CA_[41C], CA_42C, CA_48C, CA_[66B], CA_[66C]
<b>3CA</b>	CA_1A-1A-3A, CA_1A-3A-3A, CA_1A-3A-7A, CA_1A-3A-8A, CA_1A-3A-19A, CA_1A-3A-20A, CA_1A-3A-28A, CA_1A-3A-32A, CA_1A-3A-38A, CA_1A-3A-40A, CA_1A-3A-41A, CA_1A-3A-42A, CA_1A-3C, CA_1A-7A-7A, CA_1A-7A-8A, CA_1A-7A-20A, CA_1A-7A-28A, CA_1A-7A-42A, CA_1A-7C, CA_1A-8A-40A, CA_1A-20A-32A, CA_1A-20A-42A, CA_1A-28A-42A, CA_1A-40C, CA_1A-41C, CA_1A-42C, CA_1A-46C, CA_1C-3A, CA_[2A]-2A-12A, CA_2A-[2A]-12A, CA_[2A]-2A-66A, CA_2A-[2A]-66A, CA_2A-2A-[66A], CA_[2A]-2A-71A, CA_2A-[2A]-71A, CA_[2A]-4A-4A, CA_2A-[4A]-4AC, CA_2A-4A-[4A], CA_[2A]-4A-5A, CA_2A-[4A]-5A, CA_[2A]-4A-12A, CA_2A-[4A]-12A, CA_[2A]-4A-29A, CA_2A-[4A]-29A, CA_[2A]-4A-71A, CA_2A-[4A]-71A, CA_2A-7A-12A, CA_[2A]-12A-66A, CA_2A-12A-[66A], CA_[2A]-12B, CA_[2A]-46A-46A, CA_[2A]-46A-66A, CA_2A-46A-[66A], CA_[2A]-46C, CA_[2A]-48A-48A, CA_[2A]-48C, CA_[2A]-48A-66A, CA_2A-48A-[66A], CA_[2A]-66A-66A, CA_2A-[66A]-66A, CA_2A-66A-[66A], CA_[2A]-66A-71A, CA_2A-[66A]-71A, CA_[2A]-[66C], CA_[2A]-66C, CA_2A-[66C], CA_3A-3A-7A, CA_3A-3A-8A, CA_3A-3A-20A, CA_3A-3A-28A, CA_3C-5A, CA_3A-7A-7A, CA_3A-7A-8A, CA_3A-7A-20A, CA_3A-7A-28A, CA_3A-7A-42A, CA_3A-7B, CA_3A-7C, CA_3C-7A, CA_3A-8A-38A, CA_3A-8A-40A, CA_3C-8A, CA_3A-20A-32A, CA_3A-20A-42A, CA_3A-28A-40A, CA_3A-28A-42A, CA_3C-20A, CA_3C-28A, CA_3A-40A-40A, CA_3A-40C, CA_3A-42A-42A, CA_3A-42C, CA_3A-46C, CA_3C-32A, CA_3C-38A, CA_3C-40A, CA_4A-4A-7A, CA_[4A]-4A-12A, CA_4A-[4A]-12A, CA_[4A]-4A-71A, CA_4A-[4A]-71A, CA_4A-7A-12A, CA_[4A]-12B, CA_[4A]-46A-46A, CA_[4A]-46C, CA_7A-7A-8A, CA_7A-20A-42A, CA_7C-20A, CA_7B-28A, CA_7C-28A, CA_7A-46C, CA_8A-40C, CA_8A-42C, CA_12A-[66A]-66A, CA_12A-66A-[66A], CA_12A-[66C], CA_19A-42C, CA_20A-38C, CA_28A-40C, CA_28A-42C, CA_40A-40C, CA_40D, CA_40A-42C, CA_40C-42A, CA_42A-42C, CA_42D, CA_46C-[66A], CA_48A-48C, CA_48D, CA_48A-48A-[66A], CA_48C-[66A], CA_[66A]-66A-71A, CA_66A-[66A]-71A
<b>4CA</b>	CA_1A-1A-3A-28A, CA_1A-3A-3A-28A, CA_1A-3A-7A-7A, CA_1A-3A-7C, CA_1A-3A-7A-8A, CA_1A-3A-7A-20A, CA_1A-3A-7A-28A, CA_1A-3A-8A-40A, CA_1A-3A-3A-8A, CA_1A-3A-40C, CA_1A-3A-42C, CA_1A-3C-5A, CA_1A-3C-7A, CA_1A-3C-8A, CA_1A-3C-28A, CA_1A-7C-28A, CA_1A-42D, CA_1A-46D, CA_2A-2A-12A-66A, CA_2A-2A-66A-66A, CA_2A-2A-66A-71A, CA_[2A]-2A-66C, CA_2A-[2A]-66C, CA_2A-2A-[66C], CA_2A-4A-7A-12A, CA_2A-12A-66A-66A, CA_2A-46A-46A-66A, CA_[2A]-46A-46C, CA_[2A]-46C-66A, CA_2A-46C-[66A], CA_[2A]-46D, CA_[2C]-66A-66A, CA_2C-[66A]-66A, CA_2C-66A-[66A], CA_3A-3A-7A-7A, CA_3A-3A-7A-8A, CA_3A-3A-7A-20A, CA_3A-3A-7A-28A, CA_3A-5A-7A-7A, CA_3A-7A-7A-8A, CA_3A-7C-20A, CA_3A-7C-28A, CA_3A-28A-40C, CA_3A-28A-42C, CA_3A-40D, CA_3A-46D, CA_3C-7A-20A, CA_3C-7A-28A, CA_3C-7C, CA_3C-40C, CA_[4A]-46A-46C, CA_[4A]-46D, CA_7A-46D, CA_28A-40D, CA_28A-46D, CA_40C-40C, CA_40C-42C, CA_40E, CA_[41C]-42C, CA_42C-42C, CA_42E, CA_46A-46C-[66A], CA_46D-[66A], CA_48D-[66A], CA_48E



## Cellular

Carrier aggregation	Global Carriers
<b>5CA</b>	CCA_1A-3A-7C-28A, CA_1A-3C-7C, CA_1A-3C-40C, CA_2A-46A-46C-66A, CA_2A-46D-66A, CA_3A-28A-40D, CA_3C-7C-28A, CA_3A-40E
<b>2ULCA</b>	UL_1A-7A, UL_1A-8A, UL_1A-28A, UL_3A-7A, UL_3A-8A, UL_3A-20A, UL_3A-28A, UL_4A-7A, UL_3C, UL_7C, UL_38C, UL_39C, UL_40C, UL_41C, UL_42C
Carrier aggregation	AT&T
<b>2CA</b>	CA_[2A]-[4A], CA_[2A]-5A, CA_2A-7A, CA_[2A]-12A, CA_[2A]-14A, CA_[2A]-29A, CA_2A-30A, CA_[2A]-46A, CA_[2A]-48A, CA_[2A]-[66A], CA_[2A]-71A, CA_[4A]-5A, CA_4A-7A, CA_[4A]-12A, CA_[4A]-29A, CA_4A-30A, CA_[4A]-46A, CA_[4A]-71A, CA_5A-30A, CA_5A-[66A], CA_7A-12A, CA_12A-30A, CA_12A-[66A], CA_14A-30A, CA_14A-[66A], CA_[25A]-26A, CA_25A-41A, CA_26A-[41A], CA_29A-30A, CA_29A-[66A], CA_30A-66A, CA_46A-[66A], CA_48A-[66A], CA_[66A]-71A, CA_[2A]-[2A], CA_[4A]-[4A], CA_[25A]-[25A], CA_[41A]-[41A], CA_48A-48A, CA_[66A]-[66A], CA_[2C], CA_5B, CA_7C, CA_12B, CA_[41C], CA_48C, CA_[66B], CA_[66C]
<b>3CA</b>	CA_[2A]-2A-5A, CA_2A-[2A]-5A, CA_[2A]-2A-12A, CA_2A-[2A]-12A, CA_2A-2A-30A, CA_[2A]-2A-66A, CA_2A-[2A]-66A, CA_2A-2A-[66A], CA_[2A]-2A-71A, CA_2A-[2A]-71A, CA_[2A]-4A-4A, CA_2A-[4A]-4A, CA_2A-4A-[4A], CA_[2A]-4A-5A, CA_2A-[4A]-5A, CA_[2A]-4A-12A, CA_2A-[4A]-12A, CA_[2A]-4A-29A, CA_2A-[4A]-29A, CA_2A-4A-30A, CA_[2A]-4A-71A, CA_2A-[4A]-71A, CA_2A-5A-30A, CA_[2A]-5A-66A, CA_2A-5A-[66A], CA_2A-7A-12A, CA_2A-12A-30A, CA_[2A]-12A-66A, CA_2A-12A-[66A], CA_[2A]-12B, CA_2A-14A-30A, CA_[2A]-14A-66A, CA_2A-14A-[66A], CA_2A-29A-30A, CA_2A-30A-66A, CA_[2A]-46A-46A, CA_[2A]-46A-66A, CA_2A-46A-[66A], CA_[2A]-46C, CA_[2A]-48A-48A, CA_[2A]-48C, CA_[2A]-48A-66A, CA_2A-48A-[66A], CA_[2A]-66A-66A, CA_2A-[66A]-66A, CA_2A-66A-[66A], CA_[2A]-66A-71A, CA_2A-[66A]-71A, CA_[2A]-[66C], CA_[2A]-66C, CA_2A-[66C], CA_[4A]-4A-5A, CA_4A-[4A]-5A, CA_4A-4A-7A, CA_[4A]-4A-12A, CA_4A-[4A]-12A, CA_4A-4A-30A, CA_[4A]-4A-71A, CA_4A-[4A]-71A, CA_4A-5A-30A, CA_4A-7A-12A, CA_4A-12A-30A, CA_[4A]-12B, CA_4A-29A-30A, CA_[4A]-46A-46A, CA_[4A]-46C, CA_5A-30A-66A, CA_5A-[66A]-66A, CA_5A-66A-[66A], CA_5A-[66C], CA_12A-30A-66A, CA_12A-[66A]-66A, CA_12A-66A-[66A], CA_12A-[66C], CA_14A-30A-66A, CA_14A-[66A]-66A, CA_14A-66A-[66A], CA_[25A]-25A-26A, CA_25A-[25A]-26A, CA_25A-41C, CA_26A-[41C], CA_29A-30A-66A, CA_29A-[66A]-66A, CA_29A-66A-[66A], CA_30A-66A-66A, CA_[41A]-[41C], CA_[41A]-41C, CA_41A-[41C], CA_[41D], CA_46C-[66A], CA_48A-48C, CA_48D, CA_48A-48A-[66A], CA_48C-[66A], CA_[66A]-66A-71A, CA_66A-[66A]-71A

## Cellular

Carrier aggregation	AT&T
<b>4CA</b>	CA_2A-2A-5A-30A, CA_2A-2A-5A-66A, CA_2A-2A-12A-30A, CA_2A-2A-12A-66A, CA_2A-2A-29A-30A, CA_2A-2A-66A-66A, CA_2A-2A-66A-71A, CA_[2A]-2A-66C, CA_2A-[2A]-66C, CA_2A-2A-[66C], CA_2A-4A-4A-12A, CA_2A-4A-5A-30A, CA_2A-4A-7A-12A, CA_2A-4A-12A-30A, CA_2A-5A-30A-66A, CA_2A-5A-66A-66A, CA_2A-5B-30A, CA_[2A]-5B-66A, CA_2A-5B-[66A], CA_2A-12A-30A-66A, CA_2A-12A-66A-66A, CA_2A-29A-30A-66A, CA_2A-46A-46A-66A, CA_[2A]-46A-46C, CA_[2A]-46C-66A, CA_2A-46C-[66A], CA_[2A]-46D, CA_2A-66A-66A-71A, CA_2A-66C-71A, CA_[2C]-66A-66A, CA_2C-[66A]-66A, CA_2C-66A-[66A], CA_4A-4A-12A-30A, CA_[4A]-46A-46C, CA_[4A]-46D, CA_5A-30A-66A-66A, CA_5B-30A-66A, CA_5B-66A-66A, CA_12A-30A-66A-66A, CA_25A-41D, CA_29A-30A-66A-66A, CA_[41A]-41D, CA_[41C]-41C, CA_41C-[41C], CA_41E, CA_46A-46C-[66A], CA_46D-[66A], CA_48D-[66A], CA_48E
<b>5CA</b>	CA_2A-2A-46D, CA_2A-5B-30A-66A, CA_2A-5B-66A-66A, CA_2A-46A-46C-66A, CA_2A-46D-66A, CA_5B-30A-66A-66A, CA_46D-66A-66A
<b>2ULCA</b>	UL_2A-5A, UL_2A-12A, UL_4A-12A, UL_5A-66A, UL_5B, UL_41C
Carrier aggregation	Verizon
<b>2CA</b>	CA_[2A]-[2A], CA_[2A]-[4A], CA_[2A]-5A, CA_[2A]-13A, CA_[2A]-[66A], CA_[4A]-[4A], CA_[4A]-5A, CA_[4A]-13A, CA_5A-[66A], CA_5B, CA_13A-[66A], CA_[66A]-[66A], CA_[66B], CA_[66C], CA_[2A]-48A, CA_13A-48A, CA_48A-[66A]
<b>3CA</b>	CA_[2A]-2A-5A, CA_[2A]-2A-13A, CA_[2A]-2A-66A, CA_2A-2A-[66A], CA_[2A]-4A-5A, CA_2A-[4A]-5A, CA_[2A]-4A-13A, CA_2A-[4A]-13A, CA_[2A]-5A-66A, CA_2A-5A-[66A], CA_[2A]-13A-66A, CA_2A-13A-[66A], CA_[2A]-66A-66A, CA_2A-[66A]-66A, CA_[2A]-[66B], CA_[2A]-[66C], CA_[4A]-4A-5A, CA_[4A]-4A-13A, CA_5A-[66A]-66A, CA_5A-[66B], CA_5A-[66C], CA_13A-[66A]-66A, CA_13A-[66B], CA_13A-[66C], CA_[66A]-[66C], CA_[66D], CA_[2A]-48A-48A, CA_[2A]-48A-66A, CA_2A-48A-[66A], CA_[2A]-48C, CA_13A-48A-48A, CA_13A-48A-[66A], CA_13A-48C, CA_48A-48A-[66A], CA_48A-[66A]-66A, CA_48A-[66B], CA_48C-[66A]
<b>4CA</b>	CA_2A-48A-48A-66A, CA_[2A]-48D, CA_13A-48A-48A-66A, CA_13A-48A-48C, CA_13A-48C-[66A], CA_13A-48D, CA_48A-48A-66A-66A, CA_48A-48A-[66B], CA_48A-48A-[66C], CA_48A-48C-[66A], CA_48D-[66A]
<b>5CA</b>	CA_2A-48E, CA_13A-48A-48C-66A, CA_13A-48C-48C, CA_13A-48D-66A, CA_13A-48E, CA_48A-48C-66B, CA_48A-48C-66C, CA_48C-48C-66A, CA_48E-66A
<b>2ULCA</b>	UL_2A-13A, UL_4A-13A

## Cellular

Carrier aggregation	T-Mobile US
<b>2CA</b>	CA_[2A]-[4A], CA_[2A]-5A, CA_2A-7A, CA_[2A]-12A, CA_[2A]-14A, CA_[2A]-29A, CA_2A-30A, CA_[2A]-46A, CA_[2A]-48A, CA_[2A]-[66A], CA_[2A]-71A, CA_[4A]-5A, CA_4A-7A, CA_[4A]-12A, CA_[4A]-29A, CA_4A-30A, CA_[4A]-46A, CA_[4A]-71A, CA_5A-30A, CA_5A-[66A], CA_7A-12A, CA_12A-30A, CA_12A-[66A], CA_14A-30A, CA_14A-[66A], CA_[25A]-26A, CA_25A-41A, CA_26A-[41A], CA_29A-30A, CA_29A-[66A], CA_30A-66A, CA_46A-[66A], CA_48A-[66A], CA_[66A]-71A, CA_[2A]-[2A], CA_[4A]-[4A], CA_[25A]-[25A], CA_[41A]-[41A], CA_48A-48A, CA_[66A]-[66A], CA_[2C], CA_5B, CA_7C, CA_12B, CA_[41C], CA_48C, CA_[66B], CA_[66C]
<b>3CA</b>	CA_[2A]-2A-5A, CA_2A-[2A]-5A, CA_[2A]-2A-12A, CA_2A-[2A]-12A, CA_2A-2A-30A, CA_[2A]-2A-66A, CA_2A-[2A]-66A, CA_2A-2A-[66A], CA_[2A]-2A-71A, CA_2A-[2A]-71A, CA_[2A]-4A-4A, CA_2A-[4A]-4A, CA_2A-4A-[4A], CA_[2A]-4A-5A, CA_2A-[4A]-5A, CA_[2A]-4A-12A, CA_2A-[4A]-12A, CA_[2A]-4A-29A, CA_2A-[4A]-29A, CA_2A-4A-30A, CA_[2A]-4A-71A, CA_2A-[4A]-71A, CA_2A-5A-30A, CA_[2A]-5A-66A, CA_2A-5A-[66A], CA_2A-7A-12A, CA_2A-12A-30A, CA_[2A]-12A-66A, CA_2A-12A-[66A], CA_[2A]-12B, CA_2A-14A-30A, CA_[2A]-14A-66A, CA_2A-14A-[66A], CA_2A-29A-30A, CA_2A-30A-66A, CA_[2A]-46A-46A, CA_[2A]-46A-66A, CA_2A-46A-[66A], CA_[2A]-46C, CA_[2A]-48A-48A, CA_[2A]-48C, CA_[2A]-48A-66A, CA_2A-48A-[66A], CA_[2A]-66A-66A, CA_2A-[66A]-66A, CA_2A-66A-[66A], CA_[2A]-66A-71A, CA_2A-[66A]-71A, CA_[2A]-[66C], CA_[2A]-66C, CA_2A-[66C], CA_[4A]-4A-5A, CA_4A-[4A]-5A, CA_4A-4A-7A, CA_[4A]-4A-12A, CA_4A-[4A]-12A, CA_4A-4A-30A, CA_[4A]-4A-71A, CA_4A-[4A]-71A, CA_4A-5A-30A, CA_4A-7A-12A, CA_4A-12A-30A, CA_[4A]-12B, CA_4A-29A-30A, CA_[4A]-46A-46A, CA_[4A]-46C, CA_5A-30A-66A, CA_5A-[66A]-66A, CA_5A-66A-[66A], CA_5A-[66C], CA_12A-30A-66A, CA_12A-[66A]-66A, CA_12A-66A-[66A], CA_12A-[66C], CA_14A-30A-66A, CA_14A-[66A]-66A, CA_14A-66A-[66A], CA_[25A]-25A-26A, CA_25A-[25A]-26A, CA_25A-41C, CA_26A-[41C], CA_29A-30A-66A, CA_29A-[66A]-66A, CA_29A-66A-[66A], CA_30A-66A-66A, CA_[41A]-[41C], CA_[41A]-41C, CA_41A-[41C], CA_[41D], CA_46C-[66A], CA_48A-48C, CA_48D, CA_48A-48A-[66A], CA_48C-[66A], CA_[66A]-66A-71A, CA_66A-[66A]-71A
<b>4CA</b>	CA_2A-2A-5A-30A, CA_2A-2A-5A-66A, CA_2A-2A-12A-30A, CA_2A-2A-12A-66A, CA_2A-2A-29A-30A, CA_2A-2A-66A-66A, CA_2A-2A-66A-71A, CA_[2A]-2A-66C, CA_2A-[2A]-66C, CA_2A-2A-[66C], CA_2A-4A-4A-12A, CA_2A-4A-5A-30A, CA_2A-4A-7A-12A, CA_2A-4A-12A-30A, CA_2A-5A-30A-66A, CA_2A-5A-66A-66A, CA_2A-5B-30A, CA_[2A]-5B-66A, CA_2A-5B-[66A], CA_2A-12A-30A-66A, CA_2A-12A-66A-66A, CA_2A-29A-30A-66A, CA_2A-46A-46A-66A, CA_[2A]-46A-46C, CA_[2A]-46C-66A, CA_2A-46C-[66A], CA_[2A]-46D, CA_2A-66A-66A-71A, CA_2A-66C-71A, CA_[2C]-66A-66A, CA_2C-[66A]-66A, CA_2C-66A-[66A], CA_4A-4A-12A-30A, CA_[4A]-46A-46C, CA_[4A]-46D, CA_5A-30A-66A-66A, CA_5B-30A-66A, CA_5B-66A-66A, CA_12A-30A-66A-66A, CA_25A-41D, CA_29A-30A-66A-66A, CA_[41A]-41D, CA_[41C]-41C, CA_41C-[41C], CA_41E, CA_46A-46C-[66A], CA_46D-[66A], CA_48D-[66A], CA_48E
<b>5CA</b>	CA_2A-2A-46D, CA_2A-5B-30A-66A, CA_2A-5B-66A-66A, CA_2A-46A-46C-66A, CA_2A-46D-66A, CA_5B-30A-66A-66A, CA_46D-66A-66A
<b>2ULCA</b>	UL_2A-5A, UL_2A-12A, UL_4A-12A, UL_5A-66A, UL_5B, UL_41C

## Cellular

Carrier aggregation	CBRS
<b>2CA</b>	CA_42A-42A, CA_48A-48A, CA_42C, CA_48C
<b>3CA</b>	CA_42A-42C, CA_42D, CA_48A-48C, CA_48D
<b>2ULCA</b>	UL_42C