

# Cisco IG20 Series IoT Gateways



## Contents

Product overview

Features and benefits

Prominent features

Product specifications

Ordering information

Warranty information

Simply connect all your assets to gain operational insights with the Cisco IG20 Series IoT Gateways.



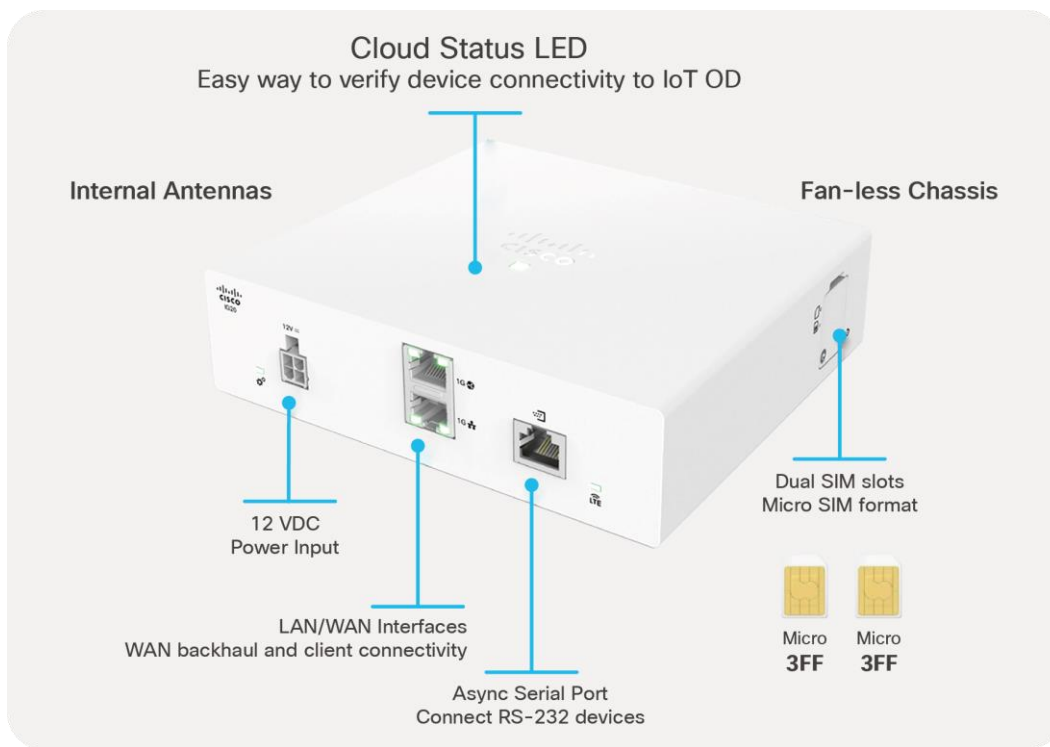
**Figure 1.**  
Solution Highlights

## Product overview

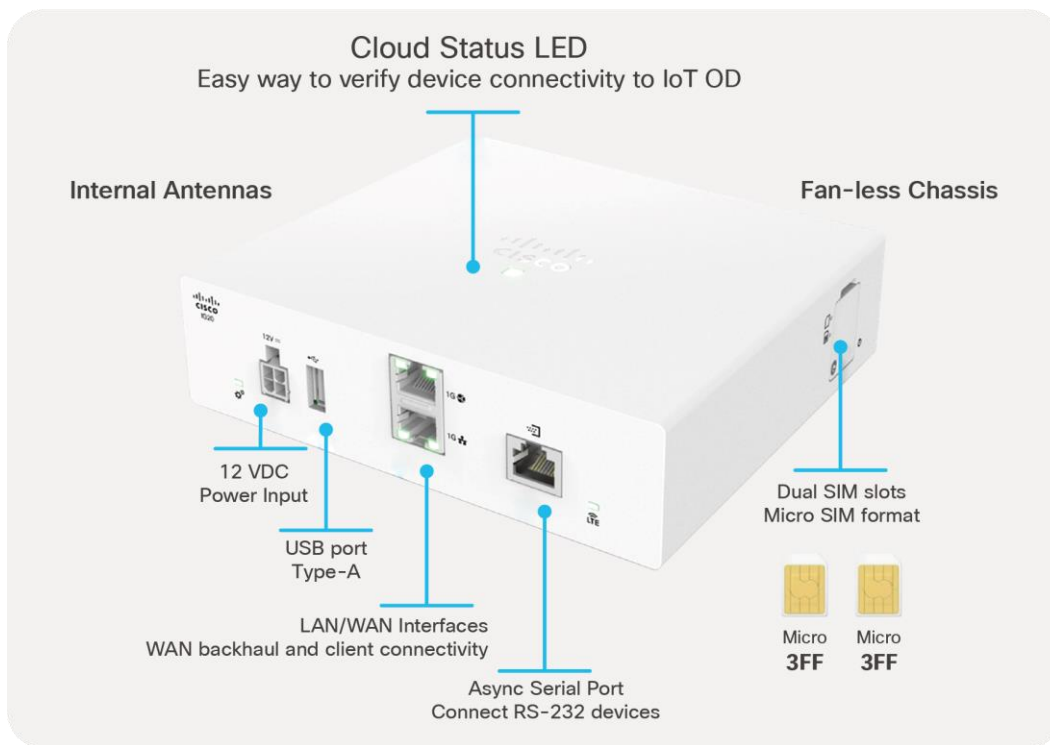
The Cisco® IG20 Series IoT Gateways provide simple, essential connectivity for assets at mass scale. Real-time connectivity provides insights that help organizations increase efficiencies, reduce downtime, and improve the user experience.

The IG20 Series offers low upfront costs with an affordable monthly cloud subscription. The gateways take just a few minutes to deploy with minimal IT support. Day-0 setup is fast: Plug in and power on, with no staging required. The SIM provisioning is automated, requiring no manual intervention. The gateways have essential security built in to secure the hardware, interfaces, and all communications between the gateway and the data center.

The IoT Gateways are centrally managed through the easy-to-use Cisco IoT Operations Dashboard. You can remotely deploy, monitor, and troubleshoot the gateways at scale. With IoT Operations Dashboard, you can gain insights into network usage and carry out updates remotely without sending anyone onsite.



**Figure 2.**  
IG21 Series LTE model

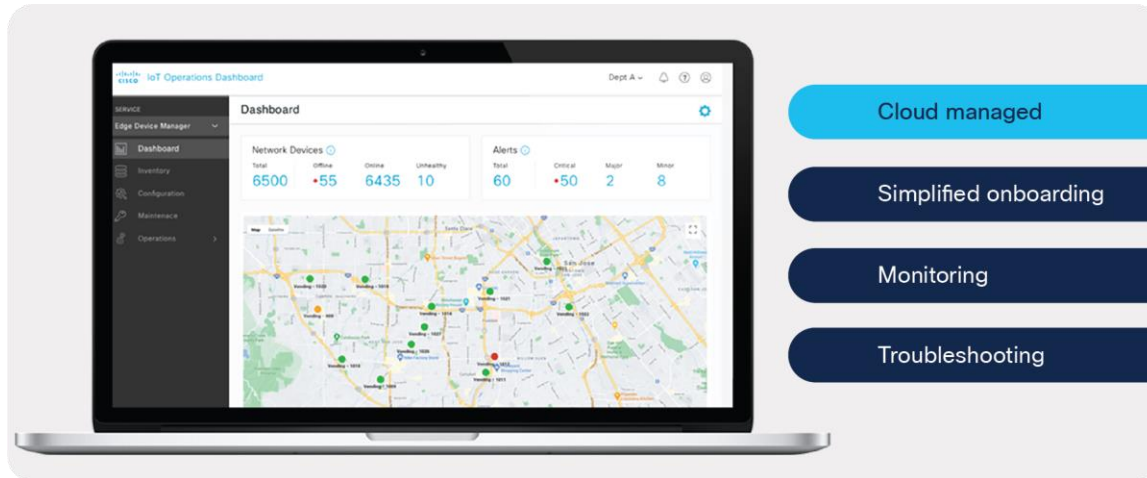


**Figure 3.**  
IG21 LTE with Wi-Fi model

## Features and benefits

### Simplicity

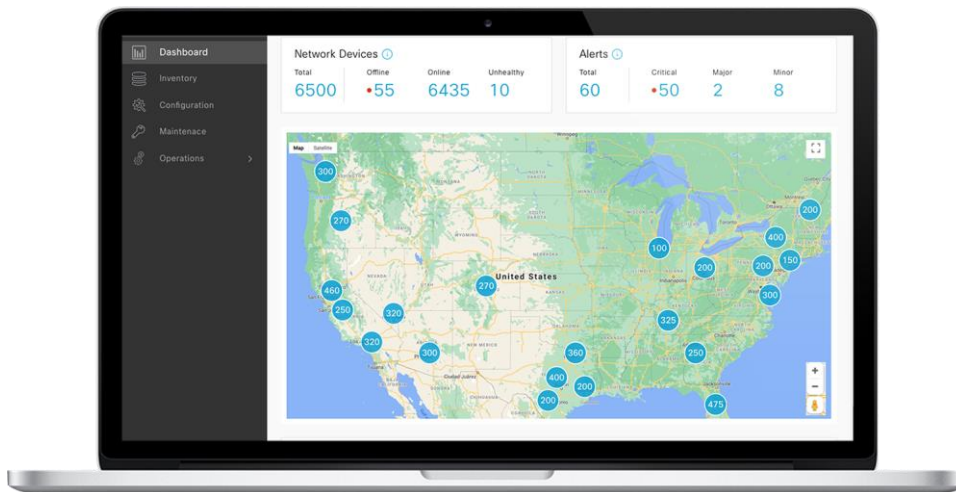
Cloud managed with simplified workflows for onboarding, monitoring, and troubleshooting capabilities.



**Figure 4.**  
Cisco IoT Operations Dashboard

### Scalability

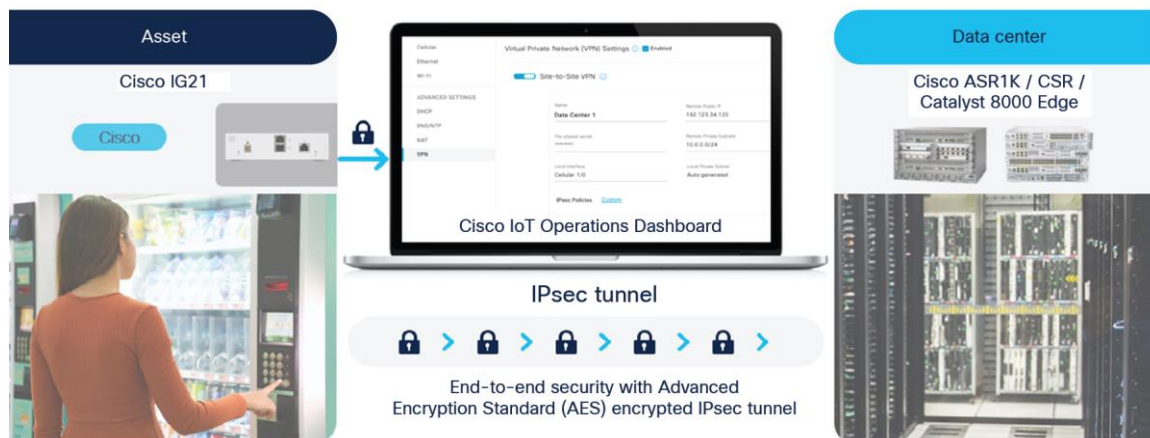
Scale to thousands of locations and connect assets to monitor remotely.



**Figure 5.**  
Remote monitoring of thousands of locations

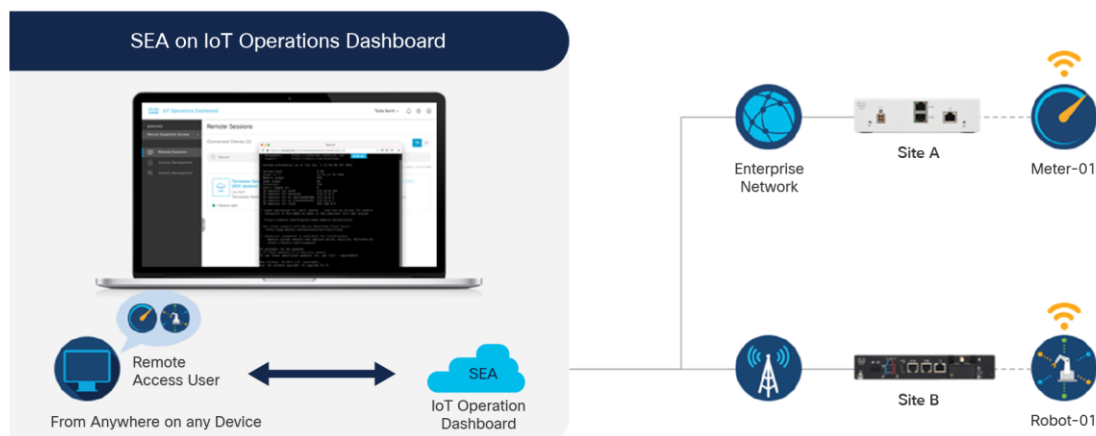
## Security

Simple, secure connectivity: The IoT Gateways provide end-to-end security with Advanced Encryption Standard (AES) encrypted IPsec tunnel.



**Figure 6.**  
Secure connectivity

Secure remote access to operational assets: Remotely monitor and diagnose the assets connected to the IoT Gateway.



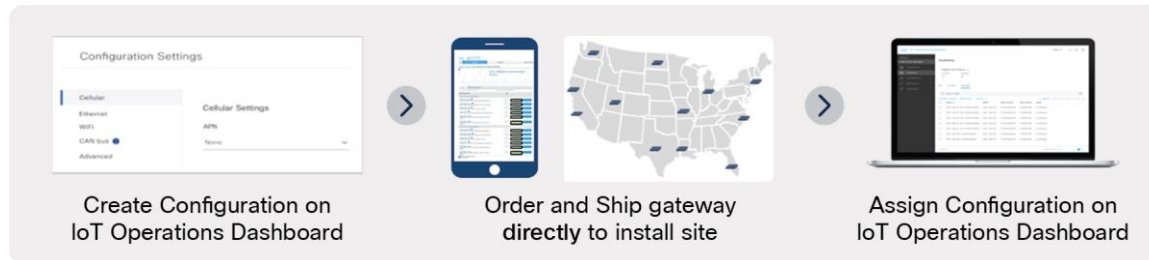
**Figure 7.**  
Ability to monitor and diagnose operational assets remotely

## Prominent features

### Fast and simple day-0 setup

#### Provisioning

The IG21 Gateways are centrally managed by the Cisco IoT Operations Dashboard. The dashboard automatically activates the SIM card with your service provider account as part of the day-0 gateway provisioning, for a true zero-touch experience. No staging is required, reducing your deployment timelines.



**Figure 8.**  
Day-0 onboarding

### Easy installation

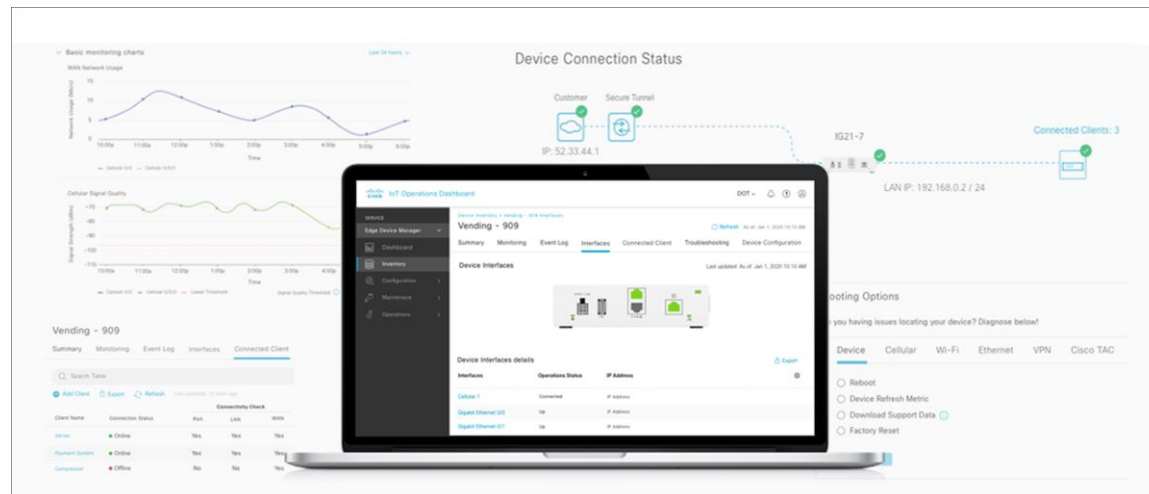
Simply plug it in and turn it on to install the gateway. The green LED indicates that the gateway is fully provisioned.



**Figure 9.**  
Installing and verifying the gateway

## Cloud management of IoT Gateway and attached devices

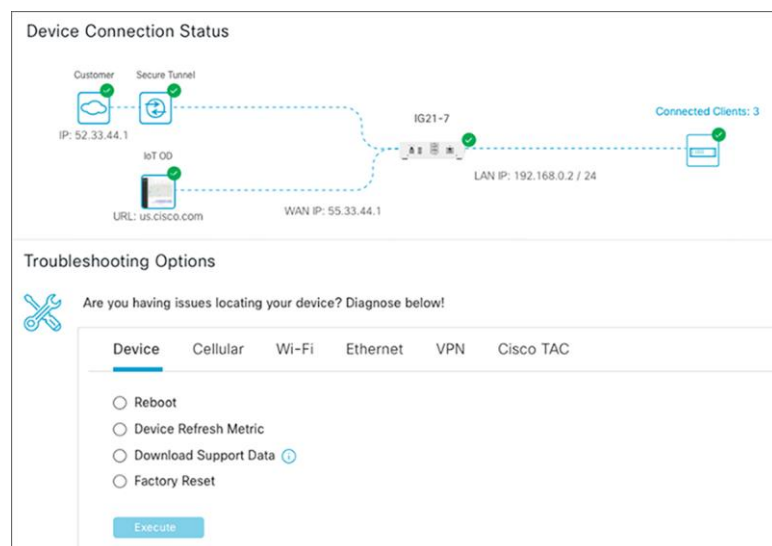
You can monitor all the gateways remotely and get alerts for any critical events. Monitoring is extended to all clients connected to the gateway. Graphs and other visuals for the metrics make it easy to identify issues and take corrective actions immediately.



**Figure 10.**  
Dashboard metrics

## Simple to troubleshoot

The dashboard provides end-to-end visibility and remote troubleshooting. It allows you to visualize the deployment so that you can diagnose potential problems. You can then identify the problems with a few clicks using the troubleshooting options.






**Figure 11.**  
Troubleshooting workflow






## Product specifications

**Table 1.** IG21 LTE models



	<b>IG21-VZ-K9</b> <b>IG21-VZ-B-K9</b> 	<b>IG21-NA-K9</b> <b>IG21-NA-B-K9</b> 	<b>IG21-EU-K9</b> <b>IG21-EU-E-K9</b> 
<b>Region and service provider</b>	Verizon US	ATT US and Canada	Europe
<b>Cellular bands*</b>	LTE: B4, B13	LTE: B2, B4, B5, B12; UMTS: B2, B4, B5	LTE: B1, B3, B7, B8, B20, B28; UMTS: B1, B8; eGSM: DCS 1800



**Table 2.** Product specifications

	<b>IG21-VZ-K9</b> <b>IG21-NA-K9</b> <b>IG21-EU-K9</b> 	<b>IG21-VZ-B-K9</b> <b>IG21-NA-B-K9</b> <b>IG21-EU-E-K9</b> 
<b>Description</b>	LTE-only SKU	LTE with Wi-Fi SKU
<b>USB 2.0 (Type A)</b>	–	1
<b>Wi-Fi (2x2) 2.4 GHz</b>	–	802.11b/n
<b>Power load (idle/max)</b>	4W /10W	6W /13W
<b>Weight</b>	495 grams	506 grams
<b>Recommended use cases</b>	Enterprise IoT asset connectivity	
<b>Recommended max clients</b>	10	
<b>LTE</b>	Cat 1	
<b>SIM slots</b>	2	
<b>Cellular modem</b>	1	
<b>LAN interface</b>	1x Gigabit Ethernet RJ45	
<b>LAN/WAN interface</b>	1x Gigabit Ethernet RJ45	
<b>Serial RS232</b>	1 RJ45 DCE	
<b>Antennas</b>	Internal	
<b>Operating temperature</b>	32°F to 104°F (0°C to 40°C)	

	<b>IG21-VZ-K9</b> <b>IG21-NA-K9</b> <b>IG21-EU-K9</b> 	<b>IG21-VZ-B-K9</b> <b>IG21-NA-B-K9</b> <b>IG21-EU-E-K9</b> 
<b>Storage temperature</b>	14°F to 140°F (-10°C to 60°C)	
<b>Operating altitude</b>	3048 meters /10000 feet	
<b>Mounting</b>	Floor, panel, wall, DIN rail	
<b>Dimensions (w x d x h)</b>	6.3 x 5.45 x 1.68 in. (160 x 138.5 x 42.6 mm)	
<b>Power input</b>	12V DC	
<b>Humidity</b>	10% to 90% (noncondensing)	
<b>Memory</b>	1 GB DDR3L (x8)	
<b>Bulk flash</b>	1 GB NAND SLC	
<b>LEDs</b>	3	

**Table 3.** Compliance

<b>Compliance</b>	<b>IG21-VZ-K9</b> <b>IG21-NA-K9</b> <b>IG21-EU-K9</b> 	<b>IG21-VZ-B-K9</b> <b>IG21-NA-B-K9</b> <b>IG21-EU-E-K9</b> 
<b>Radio</b>	EN 301 489-1, 52 (cell) EN 301 908-1, 2, 13 (cell) CFR 47 Part 22, 24, 27 (cell) RSS Gen RSS 130, 132, 133, 139 (cell)	EN 301 489-1, 19(ISM), 52(cell) EN 301 908-1, 2, 13 (cell) EN 300 328 (ISM 2.4G) CFR 47 Part 22, 24, 27 (cell) CFR 47 Part 15.247 (ISM 2.4G) RSS Gen RSS 130, 132, 133, 139 (cell) RSS 247 (ISM 2.4G)
<b>EMC emissions</b>	CISPR 32 / EN 55032 EN 61000-3-2/3 CFR 47 Part 15 subpart C ICES-003	
<b>EMC immunity</b>	EN 300 386	

Compliance	IG21-VZ-K9 IG21-NA-K9 IG21-EU-K9 	IG21-VZ-B-K9 IG21-NA-B-K9 IG21-EU-E-K9 
Safety	60950-1 62368-1 with CB with all deviations	
MPE	EN 62311 CFR 47 Part 2.1091 RSS 102	
Hazloc ATEX	No	
ENV	ENG-3396 Rev11	
Mark	CE, WEEE, RoHS cULus Listed FCC ID FCC Part 15 IC ID ICES-003	

\*LTE bands

**Table 4.** LTE and UMTS bands supported

Band	Frequency	Uplink frequencies	Downlink frequencies
	(MHz)	(MHz)	(MHz)
1	2100	1920 - 1980	2110 - 2170
2	1900	1850 - 1910	1930 - 1990
3	1800	1710 - 1785	1805 - 1880
4	1700	1710 - 1755	2110 - 2155
5	850	824 - 849	869 - 894
7	2600	2500 - 2570	2620 - 2690
8	900	880 - 915	925 - 960
12	700	698 - 716	728 - 746
13	700	777 - 787	746 - 756

Band	Frequency	Uplink frequencies	Downlink frequencies
	(MHz)	(MHz)	(MHz)
20	800	832 – 862	791 – 821
28	700	703 – 748	758 – 803
UMTS bands			
UTRA band	Frequency (MHz)	Uplink frequencies (MHz)	Downlink frequencies (MHz)
1	2100	1920 – 1980	2110 – 2170
2	1900	1850 – 1910	1930 – 1990
4	1700	1710 – 1755	2110 – 2155
5	850	824 – 849	869 – 894
8	900	880 – 915	925 – 960

## Ordering information

**Table 5.** Ordering information

Model	Description
IG21-VZ-K9	Cisco IoT IG21 with LTE for Verizon in USA
IG21-NA-K9	Cisco IoT IG21 with LTE for North America
IG21-EU-K9	Cisco IoT IG21 with LTE for Europe
IG21-VZ-B-K9	Cisco IoT IG21 with LTE and WiFi for Verizon in USA
IG21-NA-B-K9	Cisco IoT IG21 with LTE and WiFi for North America
IG21-EU-E-K9	Cisco IoT IG21 with LTE and WiFi for Europe

**Table 6.** Included in the box

Package content	Model
AC power adapter	PWR-18W-AC
Power Cord	AC power cord
Gateway	Model of gateway ordered
Quick Start Guide	IoT Gateway Quick Start Guide card
Screws	Wall mount screws x2

Table 7. Optional Accessories

Accessory	Description
IG20-DINRAIL(=)	DIN rail for IG21 (non-rugged)
IG-WALLMNT(=)	Wall mount for IG20, IG20R, and IG30R

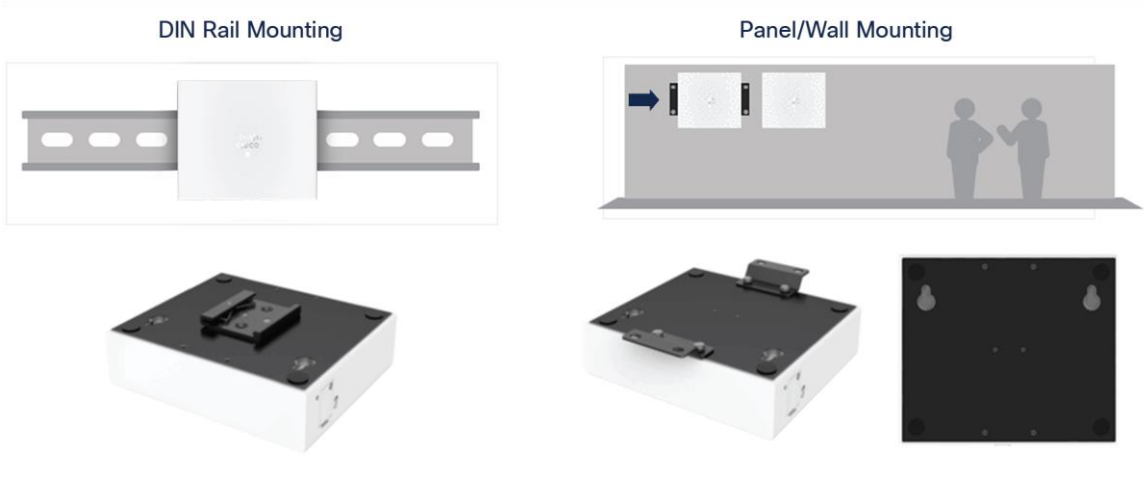


Figure 12.  
Mounting options

Warranty information

The Cisco IG20 Series IoT Gateways have a 1-year limited liability warranty.

