



Overview of Cisco 1000 Series Integrated Services Routers

Cisco 1000 Series Integrated Services Routers with Cisco IOS XE Software are high-performance devices that are easy to deploy and manage. The routers combine Internet access, comprehensive security, and wireless services (LTE Advanced 3.0, Wireless WAN and Wireless LAN).

- [About Cisco 1000 Series Integrated Service Routers, on page 1](#)
- [Periodic Inspection and Cleaning, on page 24](#)

About Cisco 1000 Series Integrated Service Routers

The Cisco 1000 Series Integrated Services Routers are the next generation, IOS XE-based, multi core, branch routers. They are available in both fixed and modular form factors. The Cisco 1000 Series Integrated Services Routers is best suited for small and midsize businesses, enterprise branches, and as customer premises equipment in managed services environments.

Table 1: Base Models of the Cisco 1000 Series Integrated Services Routers

Base Models	Front Panel Switch Ports	WAN Ports	Console Port	(Optional) POE	(Optional) WLAN	(Optional) LTE	(Optional) DSL
C111x-8P	8	2 (1 Combo RJ-45/SFP + 1 RJ-45)	Serial RJ-45, Micro USB	4PoE/2PoE+	None	4G LTE-Advanced (CAT6) with carrier aggregation	G.FAST, VDSL2 and ADSL2/2+
C1111X-8P	8	2 (1 Combo RJ-45/SFP + 1 RJ-45)	Serial RJ-45, Micro USB	4PoE/2PoE+	None	None	None

Base Models	Front Panel Switch Ports	WAN Ports	Console Port	(Optional) POE	(Optional) WLAN	(Optional) LTE	(Optional) DSL
C111x-4P	4	2 (1 Combo RJ-45/SFP + 1 RJ-45)	Serial RJ-45, Micro USB	2 POE/1 POE+	802.11ac WAVE 2	4G LTE-Advanced (CAT6) with carrier aggregation	VDSL2 and ADSL2/2+
C1104-4P1E2Wx	4	1 RJ-45	Micro USB	None	802.11ac WAVE 2 (C1104-4P1E2Wx)	4G pluggable LTE (CAT 4) and pluggable LTE Advanced (CAT 6) with carrier aggregation	None
C1101-4P	4	1 RJ-45	Micro USB	None	None	None	None
C1109-2PLTE	2	1 RJ-45	Micro USB	None	None	4G LTE (CAT 4)	None
C1109-4PLTE2P	4	1 RJ45	Micro USB	None	802.11ac WAVE 2 (C1109-4PLTE2P)	Dual pluggable modems - 4G pluggable LTE (CAT 4) and pluggable LTE Advanced (CAT 6) with carrier aggregation	None
C1121-4P	4	2(1 Combo RJ45/SFP+1 RJ45	Micro USB	2 POE/1 POE+	None	None	None

Base Models	Front Panel Switch Ports	WAN Ports	Console Port	(Optional) POE	(Optional) WLAN	(Optional) LTE	(Optional) DSL
C1121-4PTEP	4	2(1 Combo RJ45/SFP+1 RJ45)	Micro USB	2 POE/1 POE+	None	4G Pluggable LTE (CAT 4) and pluggable LTE Advanced (CAT 6) with carrier aggregation	None
C11x1(X)-8P*	8	2(1 Combo RJ45/SFP+1 RJ45)	Micro USB	4 POE/2 POE+	None	None	None
C11x1(X)-8PTEP *	8	2(1 Combo RJ45/SFP+1 RJ45)	Micro USB	4 POE/2 POE+	None	4G Pluggable LTE (CAT 4) and pluggable LTE Advanced (CAT 6) with carrier aggregation	VDSL2, ADSL2/2+, G.SHDSL
C12X8PTEP C12X8PTEPw	8	2(1 Combo RJ45/SFP+1 RJ45)	Micro USB	4 POE/2 POE+	802.11 AC WAVE 2	4G Pluggable LTE (CAT 4) and pluggable LTE Advanced (CAT 6) with carrier aggregation	None
C13X8PTEP C13X8PTEPw	8	2x L3 Gigabit RJ45/SFP Combo	Serial RJ45	4 POE/2 POE+	802.11 AX WiFi 6	5G Pluggable LTE	None
C1131X-8PWx C1131-8PWx	8	2x L3 Gigabit RJ45/SFP Combo	Serial RJ45	4 POE/2 POE+	802.11 AX WiFi 6	None	None

Table 2: Pluggable Modules of the Cisco 1000 Series Integrated Services Routers

Pluggable Interface Modules	Pluggable Interface Modules Technology
P-LTE-GB	CAT4 LTE Pluggable Europe SMS/GPS
P-LTE-GB=	CAT4 LTE Pluggable Europe SMS/GPS
P-LTE-IN	CAT4 LTE Pluggable India and China
P-LTE-IN=	CAT4 LTE Pluggable India and China
P-LTE-JN	CAT4 LTE Pluggable Japan
P-LTE-JN=	CAT4 LTE Pluggable Japan
P-LTE-NA	CAT4 LTE Pluggable for North America
P-LTE-NA=	CAT4 LTE Pluggable for North America
P-LTE-US	CAT4 LTE Pluggable for United States
P-LTE-US=	CAT4 LTE Pluggable for United States
P-LTE-VZ	CAT4 LTE Pluggable Verizon
P-LTE-VZ=	CAT4 LTE Pluggable Verizon
P-LTEA-EA	CAT6 LTE Advanced Pluggable for Europe and North America
P-LTEA-EA=	CAT6 LTE Advanced Pluggable for Europe and North America
P-LTEA-LA	CAT6 LTE Advanced Pluggable for APAC, LATAM, and ANZ
P-LTEA-LA=	CAT6 LTE Advanced Pluggable for APAC, LATAM, and ANZ
P-LTEAP18-GL	CAT6 LTE Advanced PRO Pluggable for ALL Global Regions
P-LTEAP18-GL=	CAT6 LTE Advanced PRO Pluggable for ALL Global Regions
P-5GS6-GL	5G Sub-6 GHz Pluggable Interface Module



Note P-5GS6-GL is supported on C8300, C8200, C8200L, and Cisco 1000 Series Integrated Service Routers. P-5GS6-GL is supported on Cisco 1000 Series Integrated Service Routers from the Cisco IOS XE 17.9.2 release.



Note Base Models with an 'X' has 8GB of DRAM and Flash memory. Example: C1111X-8P

The C1131 models have 4GB of DRAM and 8G flash memory.

The C1131X models have 8GB of DRAM and 16G flash memory.

For the C1131 series, only the Class A statements in the Trademark notice, which is available at the beginning of this guide, is valid.

Base Models without an 'X' have 4GB of DRAM and Flash Memory. Example: C1111-8P

For base model-C11x1X-8PLTEP, 'x' represents the CPU performance level.

For more information on the features and specifications of Cisco 1000 Series Integrated Services Routers, refer to the [Cisco 1000 Series Integrated Services Routers Solution Overview](#) document and [Cisco 1000 Series Integrated Services Routers](#) datasheet.

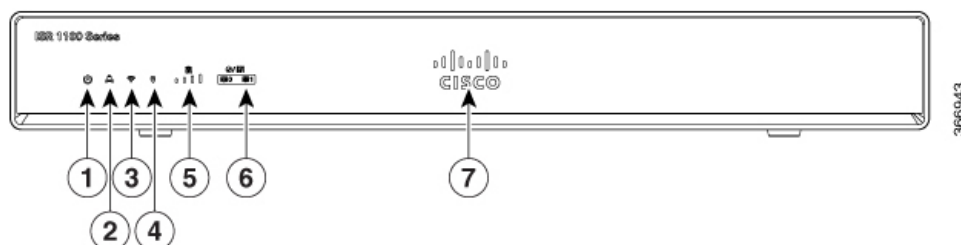
Chassis Views



Note The compliance label is present at the bottom of the product.

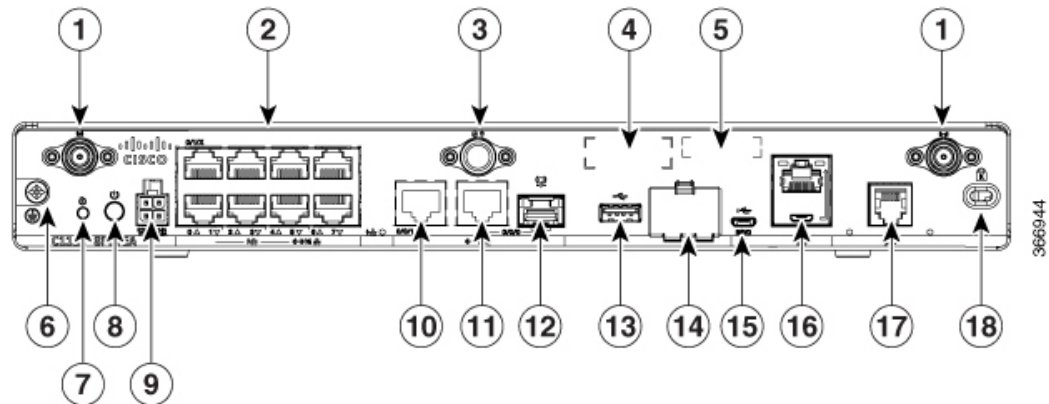
This section contains front and back panel views of the Cisco 1000 Series Integrated Services Routers showing locations of the power and signal interfaces, interface slots, status indicators, and chassis identification labels.

Figure 1: C111x Series - Bezel View



1	Status	2	VPN
3	Wi-Fi	4	GPS
5	LTE signal intensity	6	LTE data/SIM
7	Illuminated Cisco logo		

Figure 2: C111x-8P - I/O View

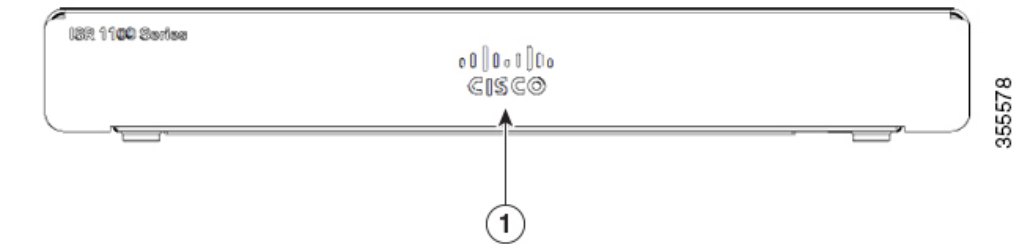


1	LTE antennas – main and diversity	2	Ethernet switch
3	GPS connection	4	CLEI label
5	Serial number	6	Grounding
7	Reset button	8	Power switch
9	4-pin power connector	10	GE 0/0/1
11	GE 0/0/0 - RJ45	12	GE 0/0/0 - SFP
13	USB3.0	14	Lower slot0 Upper slot1
15	LTE provisioning port	16	RJ45/Micro USB console
17	DSL	18	Kensington lock slot
19	Product Identification Number (PID)		



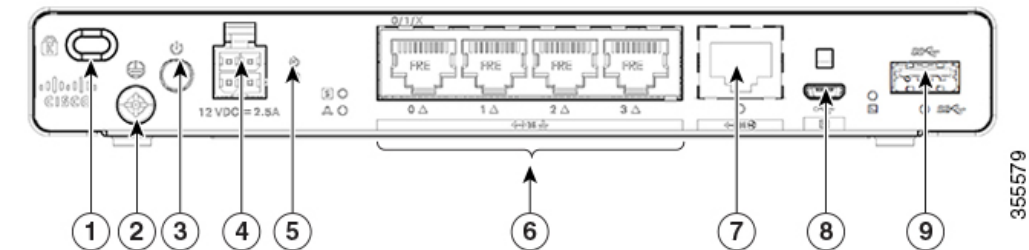
Note For more information on the Reset Button, refer to the Reset Overview section in the [ISR 1000 Series Integrated Services Routers](#).

Figure 3: C1101-4P ISR - Front View



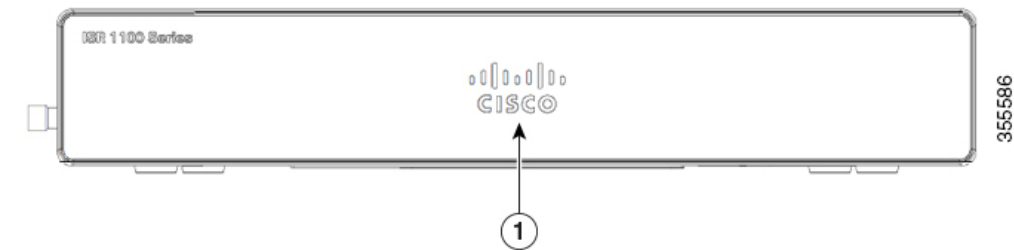
1	Non-illuminated Cisco logo	
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Figure 4: C1101-4P ISR - I/O View



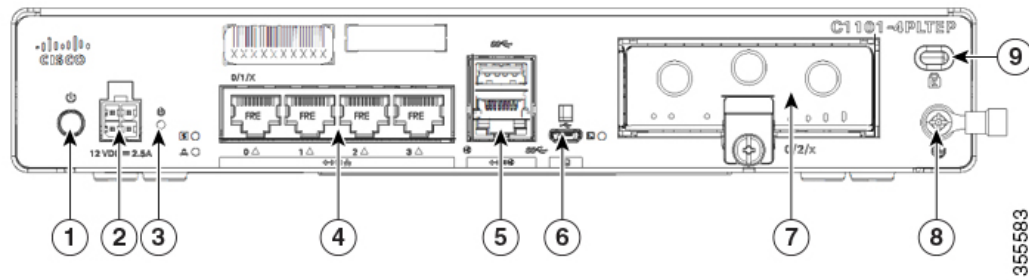
1	Kensington lock slot	2	Grounding
3	Power switch	4	4-pin power connector
5	Reset button	6	LAN: 0-4
7	GE WAN	8	Micro USB console
9	USB3.0		

Figure 5: C1101-4PLTEP-Bezel View



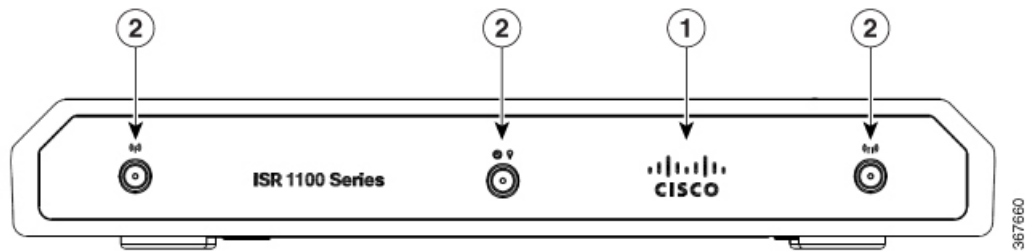
1	Non-illuminated Cisco logo	
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Figure 6: C1101-4PLTEP - I/O View



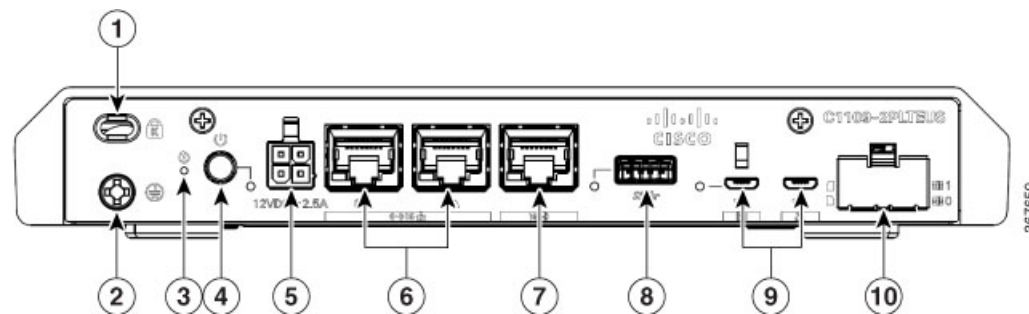
1	Power switch	2	4-pin power connector
3	Reset button	4	LAN:0-4
5	GE WAN	6	Micro-USB console port
7	Pluggable	8	Grounding
9	Kensington lock slot		

Figure 7: C1109-2PLTE - Bezel View



1	Non-illuminated Cisco logo
2	Main and diversity antenna

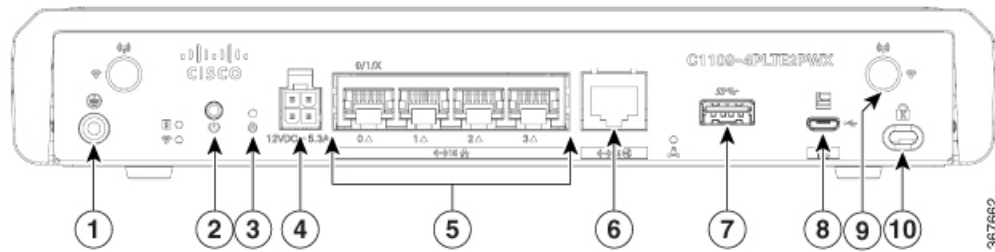
Figure 8: C1109-2PLTE - I/O View



1	Kensington lock slot	2	Grounding
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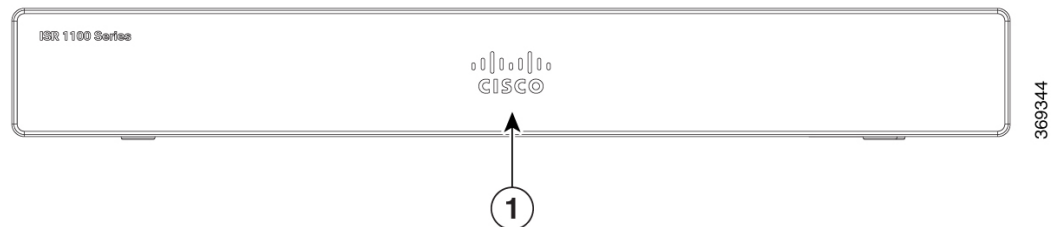
3	Reset button	4	Power switch
5	4-pin power connector	6	LAN: 0 & 1
7	GE WAN	8	Micro-USB console port
9	USB 3.0	10	Micro-SIM slots 0 and 1

Figure 9: C1109-4PLTE2PWX - I/O View



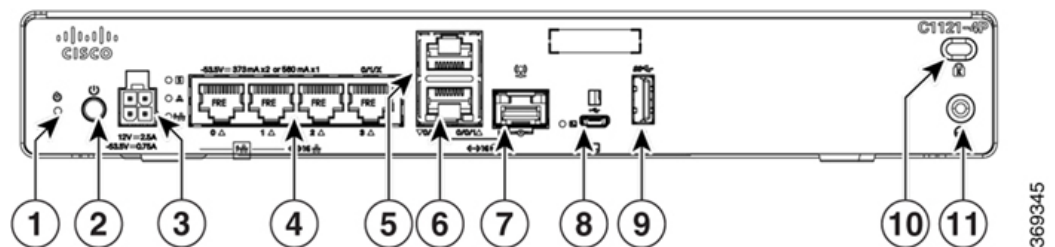
1	Grounding	2	Power switch
3	Reset button	4	4-pin power connector
5	LAN:0-4	6	GE WAN
7	USB 3.0	8	Micro-USB console port
9	LTE antenna	10	Kensington lock slot

Figure 10: C1121-4Px - Bezel View



1	Non-illuminated Cisco logo	
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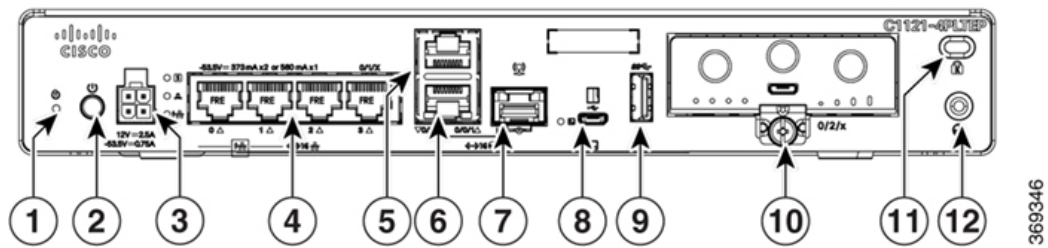
Figure 11: C1121-4P I/O View



1	Reset button	2	Power switch
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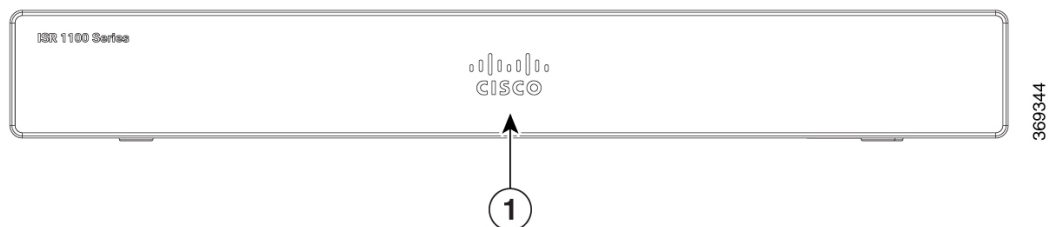
3	4-pin power connector	4	Ethernet switch
5	RJ-45 stacked connector	6	GE WAN 0/0/0 -RJ45
7	GE WAN 0/0/0 -SFP	8	Micro-USB console
9	USB 3.0	10	Kensington lock slot
11	Grounding		

Figure 12: C1121-4PLTEP I/O View



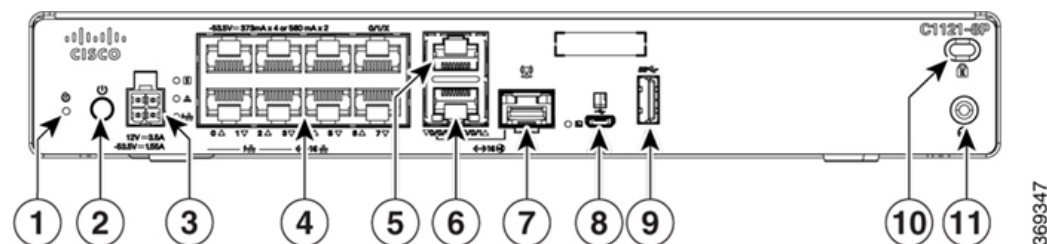
1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	GE 0/0/1	6	GE WAN 0/0/0 -RJ45
7	GE WAN 0/0/0 -SFP	8	Micro-USB console
9	USB 3.0	10	Pluggable
11	Kensington lock slot	12	Grounding

Figure 13: C1121(X)-8P - Bezel View



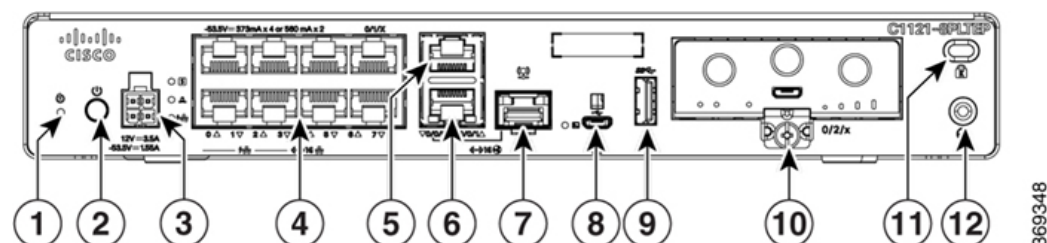
1	Non-illuminated Cisco logo	
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Figure 14: C1121(X)-8P I/O View



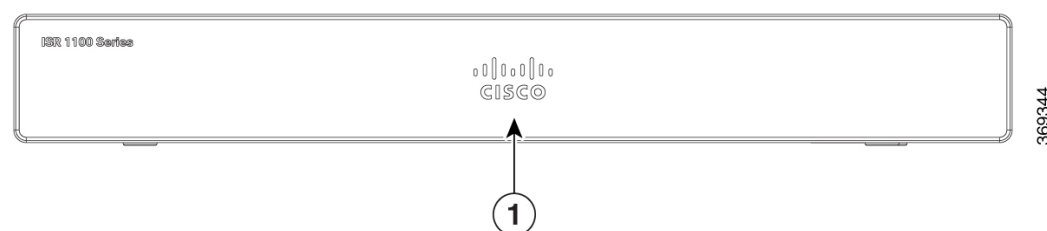
1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	RJ-45	6	GE WAN 0/0/0 -RJ45
7	GE WAN 0/0/0 -SFP	8	Micro-USB console
9	USB 3.0	10	Kensington lock slot
11	Grounding		

Figure 15: C1121-8PLTEP I/O View



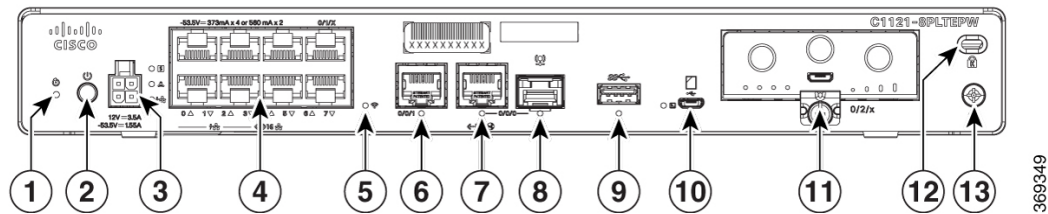
1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	GE 0/0/1	6	GE WAN 0/0/0 -RJ45
7	GE WAN 0/0/0 -SFP	8	Micro-USB console
9	USB 3.0	10	Pluggable
11	Kensington lock slot	12	Grounding

Figure 16: C1121-8PLTEPWx Bezel View



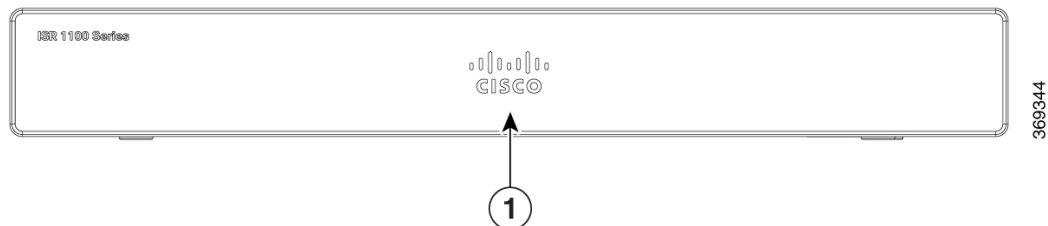
1	Non-illuminated Cisco logo	
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Figure 17: C1121(X)-8PLTEPW I/O View



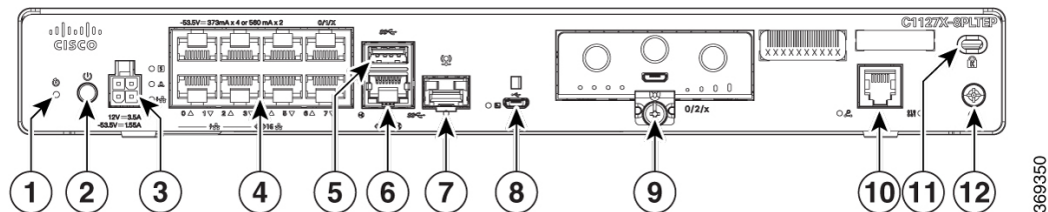
1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	Wi-Fi status	6	GE 0/0/1
7	GE WAN 0/0/0 -RJ45	8	GE WAN 0/0/0 -SFP
9	Micro-USB console	10	USB 3.0
11	Pluggable	12	Kensington lock slot
13	Grounding		

Figure 18: C1127X-8PLTEP Bezel View



1	Non-illuminated Cisco logo	
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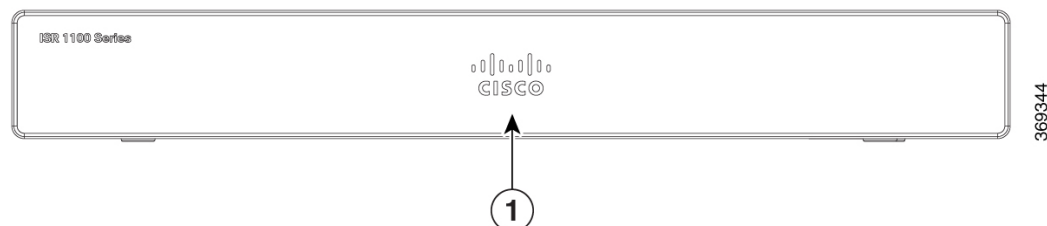
Figure 19: C1127X-8PLTEP IO Panel View



1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	RJ-45	6	GE WAN 0/0/0 -RJ45

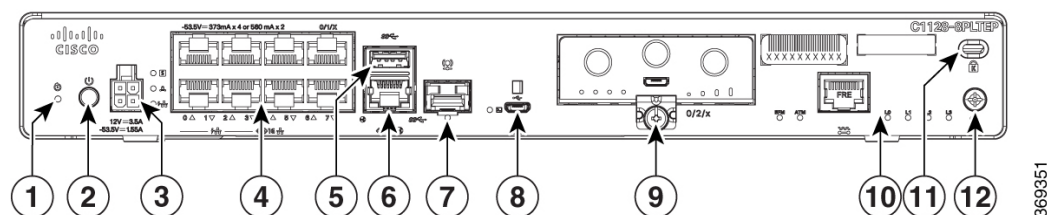
7	GE WAN 0/0/0 -SFP	8	Micro-USB console
9	Pluggable	10	DSL
11	Kensington lock slot	12	Grounding

Figure 20: C1128-8PLTEP Bezel View



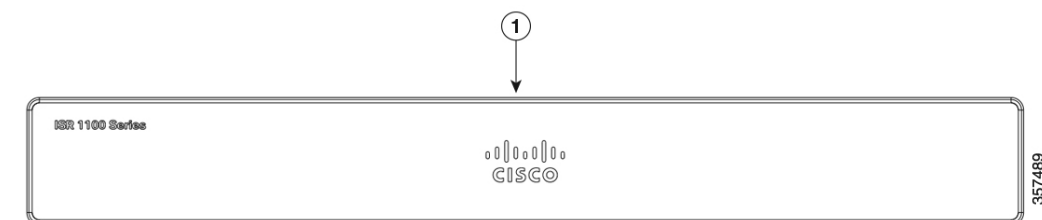
1	Non-illuminated Cisco logo	
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Figure 21: C1128-8PLTEP I/O Panel View



1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	USB 3.0	6	GE WAN 0/0/0 -RJ45
7	GE WAN 0/0/0 -SFP	8	Micro-USB console
9	Pluggable	10	Symmetrical High-speed Digital Subscriber Lines (SHDSL)
11	Kensington lock slot	12	Grounding

Figure 22: C1131(X)-8PLTEPW Bezel View



1	Non-illuminated Cisco logo	
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Figure 23: C1131(X)-8PLTEPW I/O Panel View

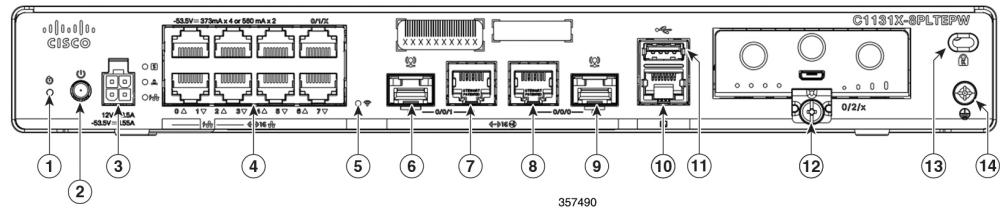


Figure 24: C1131-8PLTEPW I/O Panel View

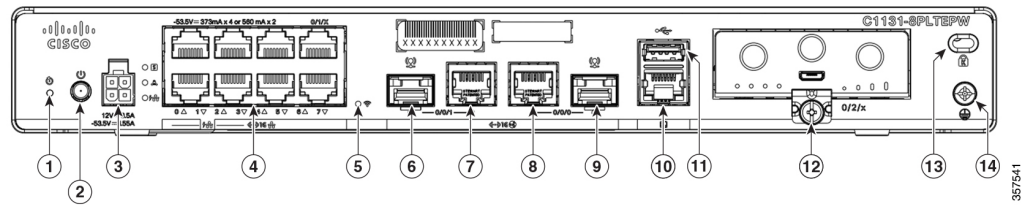
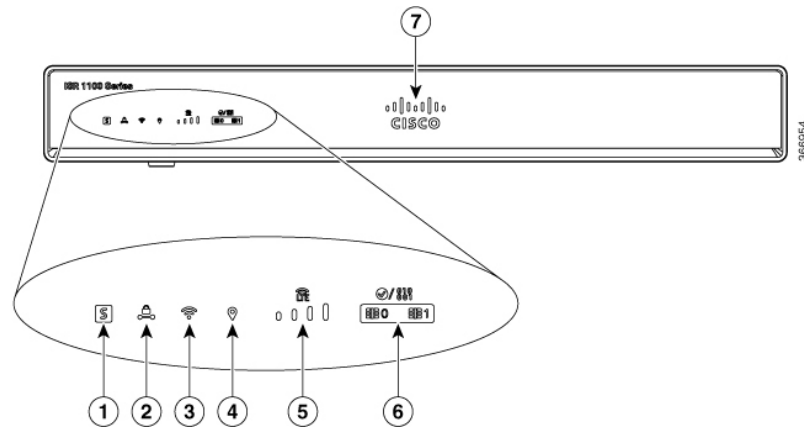


Table 3: C1131(X)-8PLTEPW/C1131-8PLTEPW I/O Panel View

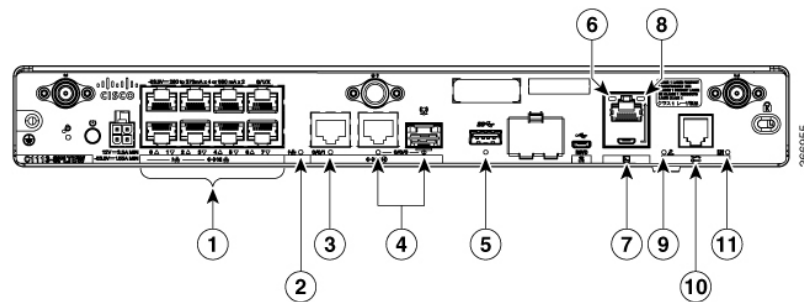
1	Reset button	2	Power switch
3	4-pin power connector	4	Ethernet switch
5	Wi-Fi status	6	GE WAN 0/0/1 - SFP
7	GE WAN 0/0/1 - RJ45	8	GE WAN 0/0/0 - RJ45
9	GE WAN 0/0/0 - SFP	10	Console
11	USB 2.0	12	Pluggable
13	Kensington lock slot	14	Grounding

LED Indicators

The following figures and table summarizes the LED indicators that are located in the bezel or chassis of the C111x series.

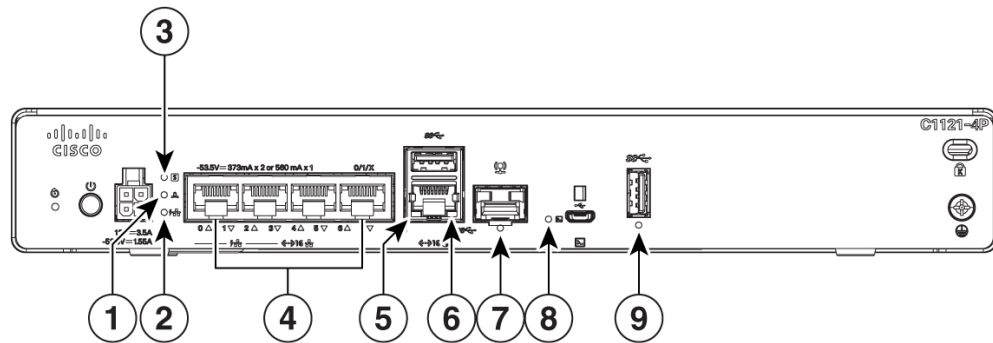
Figure 25: LED Indicators - Bezel Side

1	Status	2	VPN
3	WLAN	4	GPS
5	LTE RSSI/mode	6	LTE data/SIM
7	Cisco logo		

Figure 26: LED Indicators - I/O Side

1	GE WAN ports: 0-7 (0, 2, 4, 6 at the top and 1, 3, 5, 7 at the bottom)	2	PoE LED
3	GE1 LED	4	GE0 LED
5	USB LED	6	RJ-45 console LED
7	USB console	8	Micro USB console LED
9	CD LED	10	DATA LED

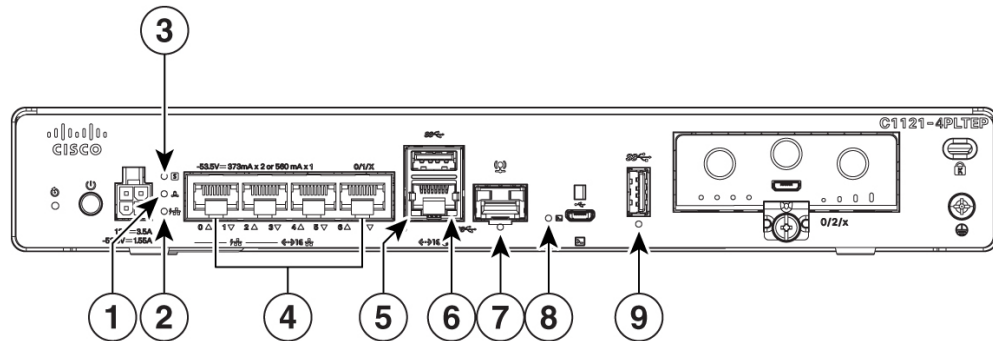
Figure 27: Cisco 1121-4Px LED Indicators



369352

1	VPN	2	PoE LED
3	Status	4	Ethernet switch ports 0-3
5	GE 0/0/0 RJ45 LED	6	GE 0/0/1 LED
7	GE 0/0/0 RJ45 LED	8	Micro USB console LED
9	USB LED		

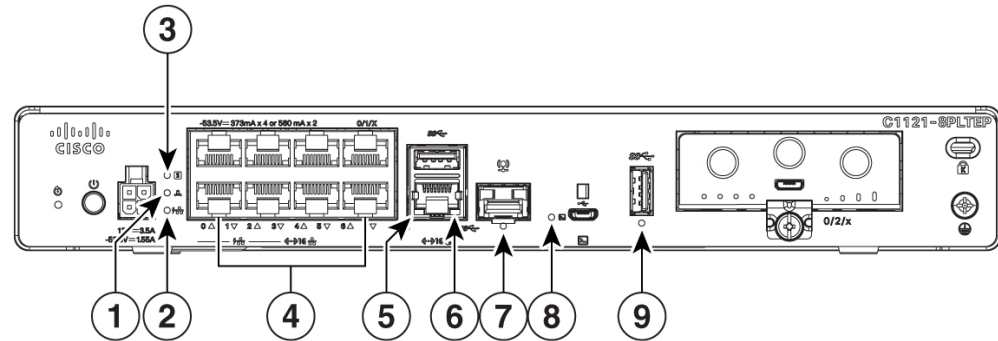
Figure 28: Cisco 1121-4PLTEP LED Indicators



369353

1	VPN	2	PoE LED
3	Status	4	Ethernet switch ports 0-3
5	GE 0/0/0 RJ45 LED	6	GE 0/0/1 LED
7	GE 0/0/0 RJ45 LED	8	Micro USB console LED
9	USB LED		

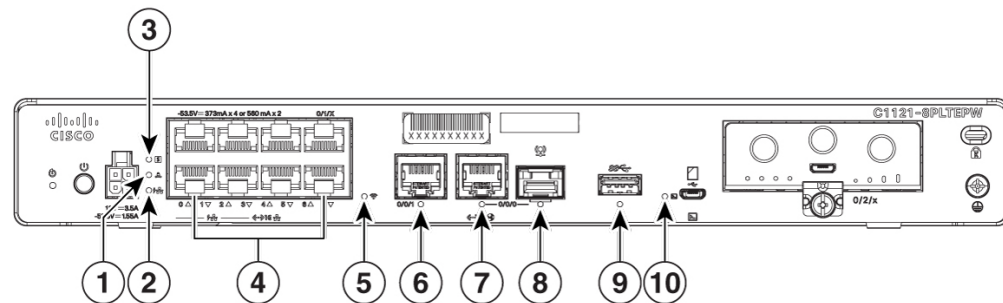
Figure 29: Cisco 11x1(X)-8P/ C11x1(X)-8PLTEP LED Indicators



369354

1	VPN	2	PoE LED
3	Status	4	Ethernet switch ports 0-7 (0, 2, 4, 6 at the top and 1, 3, 5, 7 at the bottom)
5	GE 0/0/0 RJ45 LED	6	GE 0/0/1 LED
7	GE 0/0/0 RJ45 LED	8	Micro USB console LED
9	USB LED		

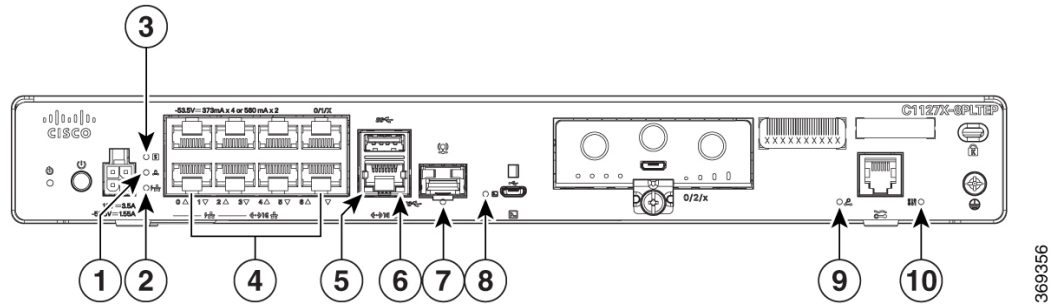
Figure 30: C1121(X)-8PLTEPWx LED Indicators



369355

1	VPN	2	PoE LED
3	Status	4	Ethernet Switch Ports 0-7 (0, 2, 4, 6 at the top and 1, 3, 5, 7 at the bottom)
5	Wi-Fi	6	GE 0/0/0 RJ45 LED
7	GE 0/0/1 LED	8	GE 0/0/0 SFP LED
9	USB LED	10	Micro USB console LED

Figure 31: Cisco 1126(X)-8PLTEP/ C1127(X)-8PxLTEP LED Indicators



1	VPN	2	PoE LED
3	Status	4	Ethernet Switch Ports 0-7 (0, 2, 4, 6 at the top and 1, 3, 5, 7 at the bottom)
5	GE 0/0/0 RJ45 LED	6	USB5 LED
7	GE 0/0/0 SFP LED	8	Micro USB console LED
9	CD LED		

Figure 32: C1131(X)-8PW LED Indicators

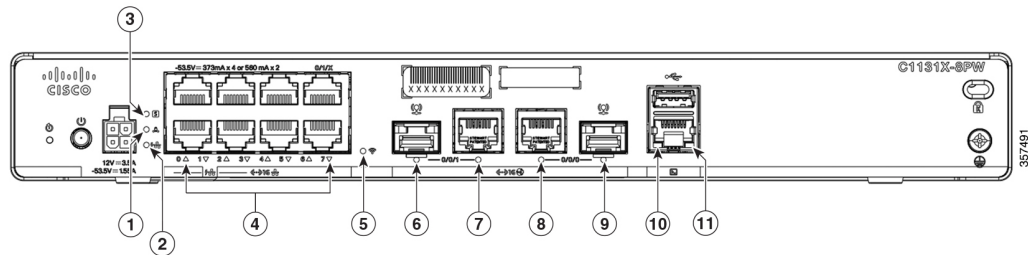


Figure 33: C1131-8PW LED Indicators

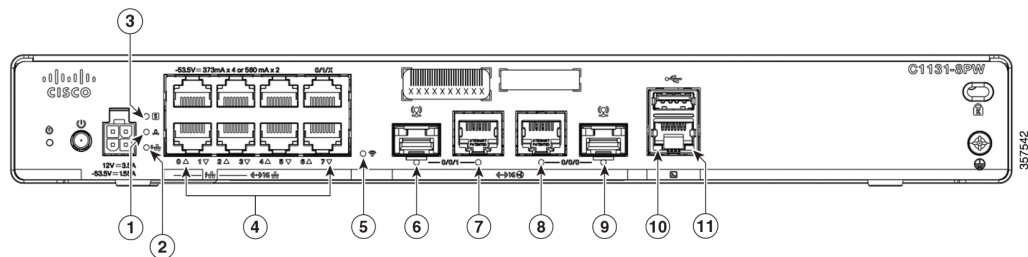


Table 4: C1131(X)-8PW/C1131-8PW LED Indicators

1	VPN	2	PoE LED
3	Status	4	Ethernet switch ports 0-7 (0, 2, 4, 6 at the top and 1, 3, 5, 7 at the bottom)

5	Wi-Fi	6	GE 0/0/1 SFP LED
7	GE 0/0/1 RJ45 LED	8	GE 0/0/0 RJ45 LED
9	GE 0/0/0 SFP LED	10	USB LED
11	Console LED		

The following table summarizes the LED indicators that are located in the bezel or chassis of the C111x series.

Table 5: LED Indicators for C111x

Port	LED Color	Description	Control Source
Cisco logo	Blue	Illuminated Cisco logo. Indicates that router is powered on.	Bezel side
Status (System status)	Green and Amber	Steady green - System is operating normally.	Bezel side. All models.
		Off—System is not out of reset mode or BIOS image is not loadable.	
		Blinking Amber — BIOS/ROMmon is booting.	
		Steady Amber — BIOS/ROMmon has completed booting, and the system is at the ROMmon prompt or booting the platform software.	
VPN OK	Green	Off— No tunnel.	Bezel side
		Steady On— At least one tunnel is up.	

Port	LED Color	Description	Control Source
LTE RSSI/mode	Green and Amber	No LEDs On—No service	Bezel side
		1 LED On— RSSI is under -100dBm.	
		2 LEDs On— Low RSSI, -99dbm < -90dBm.	
		3 LEDs On— Medium RSSI -89dBm < -70dBm.	
		4 LEDs On— High RSSI, > -69dBm.	
		Green— LTE	
		Amber— 3G	
GPS	Green	Off: GPS not configured	Bezel side
		On: GPS configured	
		Blink: GPS acquiring	
WLAN	Green, Red, and Amber	Green— Normal operating condition with at least one wireless client association.	Bezel side
		Red—Ethernet link is not operational or ethernet failure.	
		Amber—Software upgrade is in progress.	
Ethernet switch GE LAN ports, non-PoE	Green	Off— No link	I/O side
		Steady On— Link	
		Blink— TXD/RXD data	

Port	LED Color	Description	Control Source
Ethernet switch GE LAN ports, with PoE	Green and Amber	Off— No link, no device powered, PD denied power, power delivery fault PoE administratively disabled. Green steady on— link; if PoE device, power is enabled. Green Blink— TXD/RXD data Amber - PoE fault	I/O side
PoE OK	Green	Green steady on— -53.5V PoE power supply connected and all powered port operating normally. Off — No -53.5V PoE power supply connected to router.	I/O side
GE WAN ports	Green	Off— No link Steady on— link Blink— TXD/RXD data	I/O side
DSL CD	Green	Off— Shut Green blink— Training, or no shut and cable disconnected. Green steady on— Trained	I/O side
DSL data	Green	Off— No data activity Green blink— TX/RX Data	I/O side
Console	Green	Green on— console enabled.	I/O side
USB console	Green	Off— No USB device discovered. On— USB device discovered.	I/O side

Port	LED Color	Description	Control Source
USB	Green	Off: No USB device discovered.	I/O side
		On: USB device discovered.	

Table 6: LED Indicators for C1101 and C1109

LED	Color	Description	Control Source
Power	Green+Amber	System power status Off: No power Green steady on: Normal operation Green blink: Boot up phase or in ROM monitor mode Amber steady on or blink: Some issues with the system.	I/O
VPN OK	Green	VPN Status Off: No tunnel Steady on: At least one tunnel is up	I/O
Ethernet switch GE LAN ports	Green	Link activity Off: No link Steady on: Link Blink: TXD/RXD Data	I/O
GE WAN ports	Green	Link activity Off: No link Steady on: Link Blink: TXD/RXD Data	I/O

LED	Color	Description	Control Source
LTE DATA/SIM (C1101-4PLTEPW _z C1101-4PLTEPC1101-4PLTEPW _x)	Green and Amber	Single LTE modem (one modem with SIM switch-over capability) Off: Modem not up or modem up and no SIM Amber steady on: Modem up, SIM installed but not active. Green Blink: LTE data activity.	Bezel side
WLAN (C1101-4PLTEPW _x)	3-color LED: Green, Red and Amber;	WLAN functions	I/O
USB console	Green	USB console status OFF: USB console not active ON: USB console active	I/O
USB 3.0	Green	USB 3.0 status OFF: No USB device discovered ON: USB device discovered USB activity	I/O

Reset Button

The actuation of the Reset button is only recognized during ROMmon boot, that is, as the router comes to the ROMmon prompt.

The Reset button does not require much force to be pressed. The Reset button should be pressed only with a small implement such as the tip of a pen or a paper clip. When the Reset button is pressed at startup, the system LED turns green.

For more information, see the "Reset Overview" section of the [Cisco 1100 Software Configuration Guide](#).

Power Supply

C111x, C1121x, and C1131 Series Integrated Services Routers support PoE and PoE+ power to endpoints. The product power specifications are as follows:

- AC input voltage: Universal 100 to 240 VAC
- Frequency: 50 to 60 Hz

- Maximum output power: Up to 66W for non-PoE supply and upto 150W for PoE supply
- Optional PoE and PoE+
- Output voltage: +12VDC for system power and -53.5VDC for PoE power

Slots and Interfaces

About Slots, Subslots, and Port Numbering

The Cisco 1100 series designates its interfaces using a 3-tuple notation that lists the slot, sub slot and port in the format slot/sub-slot/port. The slot number is reserved for the mother board, which is "0". Each interface type is allocated a sub slot and the port number is a unique port on the interface.

Table 7: Slot, Bay, and Port Numbering

Subslot	Interface Type
0	Ethernet LAN
1	Ethernet WAN
2	LTE
3	DSL
4	Wi-Fi

Specifications of Cisco 1000 Series Integrated Services Routers

For specifications on the Cisco 1000 Series Integrated Services Routers, refer to the [Cisco 1100 Series ISR Specifications](#) document.

Periodic Inspection and Cleaning

We recommend that you periodically inspect and clean the external surface of the router. Removing is recommended to minimize the negative impact of environmental dust or debris. The frequency of inspection and cleaning is dependent upon the severity of the environmental conditions, but we recommend cleaning the router once every six months. Cleaning involves vacuuming router air intake and exhaust vents.



Note

Sites with ambient temperatures consistently above 25°C or 77°F and with potentially high levels of dust or debris might require periodic preventative maintenance cleaning.