

Cisco 4G LTE (Category 4) Wireless WAN Interface Module for Cisco 800M Integrated Services Router

The Cisco® 4G LTE Category 4 Wireless WAN Interface Module (WIM) for the Cisco 800M Integrated Services Router (ISR) provides the next generation of wireless WAN primary, backhaul, and backup solutions.

Overview

Wireless WAN interface modules (WIMs) provide highly flexible connectivity options for the Cisco 800M ISR. The Cisco 4G LTE WIM can provide either primary connectivity or backup communications, offering network resiliency for business continuity. With greater agility and speed to deployment than wired solutions, 4G LTE can reduce network cost, and it complements wire-line public and private network access. Practical applications of 4G LTE for organizations include parallel networks, primary connection, failover, in-vehicle connectivity, network convergence, and last-mile diversity. It provides enterprise-class wireless WAN (WWAN) connectivity that is used for both backup and primary applications. The 4G LTE WIM with the Cisco 800M ISR leads the industry in bringing enterprise-grade functions such as Quality of Service (QoS), Multi-Virtual Route Forwarding (Multi-VRF), advanced VPN, and unified communications solutions over LTE.

The Cisco 4G LTE WIM (Figure 1) provides an enterprise-class 4G multimode LTE WWAN solution. With the Cisco 800M ISR, 4G LTE is a powerful primary WAN access solution. Businesses can now run applications such as interactive video and telepresence on a primary 4G LTE connection, which is up to 50 times faster with far lower latency than 3G links. These 4G modules support the latest Third-Generation Partnership Project (3GPP) Release 8 Category 4 LTE standards. The Cisco 4G multimode LTE WIM provides persistent, reliable LTE connectivity with fallback and transparent handoff to earlier technologies. The card provides bandwidth to support high-definition (HD) and peer-to-peer (P2P) video calls, providing customers with an excellent mobile broadband experience. The 4G LTE WIM is tightly integrated with the services provided on the Cisco 800M ISR, which delivers secure data, video, and mobility services. The WIM is supported on the Cisco 800M ISR only.

Figure 1. Cisco 4G LTE WIM for the 800M ISR



Figure 2. Cisco 800M ISR (C841M-8X) with the 4G LTE WIM in slot 1



Ordering information

Table 1 gives ordering information for the 4G LTE WIM, and Tables 2 and 3 give the specifications.

Table 1. Ordering information

Part number	Description	Supported platforms and quantity	Minimum Cisco IOS® Software release
WIM-LTE-AS(=) WIM-LTE-LT(=) WIM-LTE-AL(=)	4G LTE 2.5 WWAN Interface Module	Cisco 800M ISR (C841M-4X, C841M-8X) 1 module per chassis	15.7

Table 2. 4G LTE WIM specifications

Feature	Specification
Product ID	WIM-LTE
LTE modem form factor	Pluggable WAN interface module
Dimensions (HxWxD)	1.65 x 3.97 x 4.96 in./4.2 x 10 x 12.6 cm
Weight	0.4 kg/0.8 lb
Software compatibility	Main features include: <ul style="list-style-type: none"> • Automatic switch failover between primary and backup links • LTE/3G Simple Network Management Protocol (SNMP) Version 2 MIBs and traps • Remote firmware upgrade over 4G LTE • Virtual diagnostic monitoring • SIM lock and unlock capability • Mobile routing: Enterprise Dynamic Mobile Network Routing (DMNR) based on Cisco Network Mobility • Receive diversity: For all supported bands (MIMO on LTE)
Single Subscriber Identity Module (SIM)/Removable User Identity Module (R-UIM)	4G LTE SIM card socket (USIM or Mini-SIM 2FF)
Theoretical Category 4 download/upload speeds	150 Mbps/50 Mbps
Wireless technologies and frequency bands	<ul style="list-style-type: none"> • WIM-LTE-AS: <ul style="list-style-type: none"> ◦ LTE Category 4: B1, B3, B5, B8, B40, B41 ◦ HSPA+, UMTS: B1, B8 ◦ EDGE, GSM, GPRS: 900/1800 ◦ Frequency (MHz): 1920–1980, 2110–2170, 1710–1785, 1805–1880, 824–849, 869–894, 880–915, 925–960, 2300–2400 • WIM-LTE-LT

Feature	Specification
	<ul style="list-style-type: none"> ◦ LTE Category 4: B2, B4, B5, B12 ◦ HSPA+: B2, B4, B5 • WIM-LTE-AL <ul style="list-style-type: none"> ◦ LTE Category 4: B1, B3, B7, B8, B20, B28 ◦ HSPA+, UMTS: B1, B8 ◦ EDGE, GSM, GPRS: 900/1800
SNMP MIBs	<ul style="list-style-type: none"> • LTE/3G MIB • ENTITY MIB • IF MIB • LTE/3G WWAN MIB persistence
Network management and diagnostics	<ul style="list-style-type: none"> • In-band and out-of-band management using Telnet (Cisco IOS Software CLI) and SNMP, including MIB II and other extensions • Industry-standard 4G LTE diagnostics and monitoring tools (QUALCOMM Air Interface Tester [CAIT] and Spirent Universal Diagnostic Monitor [UDM])
Programming interface	Cisco IOS Software Command-Line Interface (CLI)
Diversity (dual antennas) and SMA connectors for field-replaceable optional high-gain antennas	Yes

Antenna specifications

Table 3. Antenna specifications

Part number	Description	Electrical specifications	Mechanical specifications
4G-LTE-ANTM-D (1 Antenna included with WIM-LTE module)	<ul style="list-style-type: none"> • Multiband mount dipole antenna • Faceplate mount 	<p>Frequency range: 698-960 MHz , 1448-1511 MHz and 1710-2690 mhz</p> <p>Gain: 6 dBi (@ 698 – 960, 1448 – 1511, 1710 - 2400 MHz) and 9 dBi (@ 2496 – 2690 MHz)</p> <p>Maximum Input power: 3W</p> <p>Connector: SMA male connector</p> <p>Voltage standing wave ratio (VSWR): < 2.0:1</p> <p>Nominal impedance: 50 ohms</p> <p>For –N antenna and cable installation guidance, view the Connected Grid Antennas Installation Guide</p>	<ul style="list-style-type: none"> • Antenna dimensions: 9.0x1.46x0.593 in. () 229x37x11.2 mm • Temperature rating: -22 to 158°F (0 to 55 °C)

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Next steps

Learn more about the Cisco 800M ISR by visiting: <https://www.cisco.com/c/en/us/products/routers/800m-integrated-services-router-isr/index.html>. Or contact your local Cisco account representative.




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