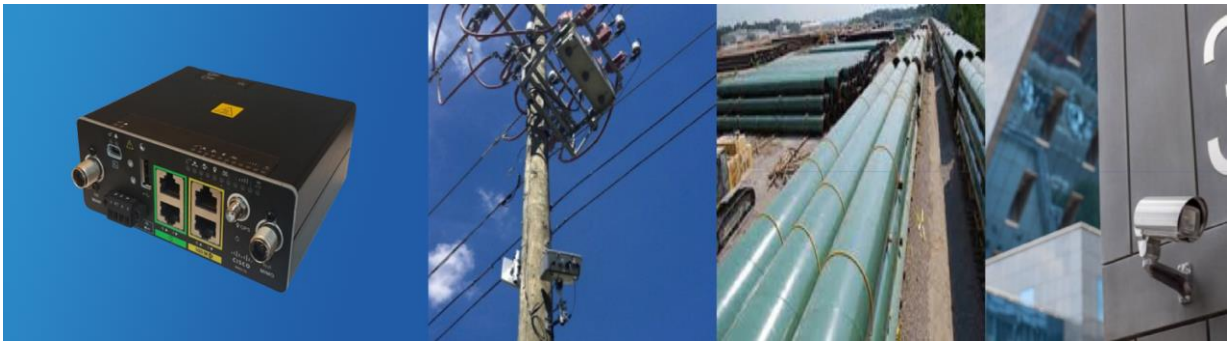
Cisco 807 Industrial Integrated Services Routers

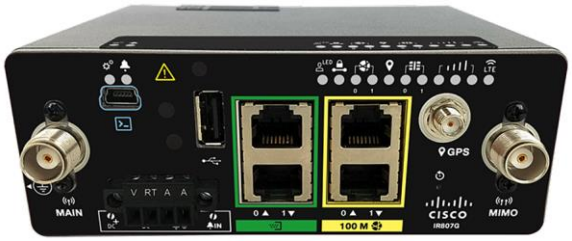
The Cisco® 807 Industrial Integrated Services Router (IR807) offers compact, low-power, secure connectivity for deployment in harsh, power-constrained industrial environments.



The Cisco IR807 (Figure 1) compact multimode 3G and 4G LTE wireless router provides an ideal solution for power-constrained needs in energy applications such as distribution automation as well as remote asset management across industry segments. The router has integrated 9.6 to 60V DC power input and withstands hostile environments, including shock, vibration, dust, and humidity, and supports a wide temperature range (–40 to 60°C and type-tested at 85°C for 16 hours). Key capabilities of the Cisco IR807 include:

- Compact, low-power, rugged design to meet space-constrained and power-constrained environments.
- Enterprise-class security and services such as Quality of Service (QoS).
- Seamless integration to the SCADA systems and diverse assets with the support for DNP3 serial to DNP3 IP and IEC 60870 T101 to T104 protocol translations.
- Cisco advanced Virtual Private Network (VPN) technologies (such as Dynamic Multipoint VPN [DMVPN] and Flexible VPN [FlexVPN]).
- Multiple Virtual Routing and Forwarding (VRF) instances for highly secure data, voice, and video communications over cellular WAN.

Figure 1. Cisco 807 Low-Power Industrial Integrated Services Routers with 4G LTE



Product Overview

The Cisco 807 Industrial Integrated Services Router supports the latest Third-Generation Partnership Project (3GPP) Release 13 Category 3 and Category 3 LTE standards. The routers provide persistent, reliable LTE connectivity transparent hand-offs between LTE and 3G networks:

- **IR807G-LTE-NA-K9:** Multimode 4G, 3G, and 2G connectivity to cellular networks operating in LTE 1900 MHz (band 2 PCS), 1700/2100 MHz (band 4 AWS), 850 MHz (band 5), 700 MHz (band 12), 700 MHz (band 17), 1900 MHz (band 25 extended PCS), and 850 MHz (band 26 extended CLR) frequencies; backward-compatible with UMTS and HSPA+ 850 MHz (band 5), 1900 MHz (band 2 PCS), and 1700/2100 MHz (band 4 AWS) and CDMA BC0, BC1, and BC10.
- **IR807G-LTE-VZ-K9:** 4G connectivity to cellular networks operating in LTE 700 MHz (band 13) and 1700/2100 MHz (band 4 AWS).
- **IR807G-LTE-GA-K9:** Multimode 4G, 3G, and 2G connectivity to cellular networks operating in LTE 800 MHz (band 20), 900 MHz (band 8), 1800 MHz (band 3), 2100 MHz (band 1), and 2600 MHz (band 7) frequencies; backward-compatible with UMTS and HSPA+ 900 MHz (band 8) and 2100 MHz (band 1) and EDGE/GSM/GPRS 900 MHz and 1900 MHz.

These routers offer a broad range of features for industrial and enterprise Internet of Things (IoT), as listed in Figure 2.

Figure 2. Cisco 807 Industrial Integrated Services Router Features

	**LTE connectivity:** LTE offers a cost-effective alternative in areas where broadband services either are not available or are very expensive. **Quality of Service (QoS):** QoS enables differentiated treatment of traffic for mission-critical services and load balancing for a better user experience.
	**Supervisory Control And Data Acquisition (SCADA) applications:** DNP3 serial–to–DNP3/IP translation and IEC 60870 T101–to–T104 protocol translation serves as a SCADA gateway and raw socket transport for managing Remote Terminal Units (RTUs).
	**Smart-grid compliant:** The routers comply with IEEE 1613 and IEC 61850-3 for distribution automation and secondary substation deployments.

	**Industrial security:** Services include area firewall and VPN services, which require no additional hardware or client software.
	**GPS:** The routers support remote tracking asset management in a distributed network.
	**Network management:** Tools such as Cisco IoT Field Network Director (FND), Cisco Prime®, Cisco Plug and Play (PnP), and Cisco Application Policy Infrastructure Controller Enterprise Module (APIC-EM) simplify deployment of a secure network headend using the Cisco Industrial Operations Kit.
	**Multiple Packet Data Network (PDN) feature:** This feature allows the router to connect to different Access Point Names (APNs), enabling traffic segregation. For example, public Internet traffic can be kept separate from mission-critical traffic emerging from the sensors and devices connected to the router.
	**4G LTE multiple-bearer QoS for cellular:** The IR807 supports 4G LTE multiple bearers, enabling differentiated treatment of traffic based on the QoS policies. The QoS feature depends on a service provider's ability to classify and enforce QoS policies and hence requires providers to launch this service in their networks.
	**Multi-VRF:** The IR807 supports the multi-VRF feature, which allows customers to configure and maintain more than one instance of a routing and forwarding table within the same Customer Edge (CE) device. For service providers, this feature enables them to support two or more VPNs, and the IP addresses can overlap several VPNs.

Business Benefits and Application Examples

Industrial customers are looking for real-time monitoring and control of industrial assets to help increase operation efficiency.

Utilities

Utilities are seeking the capability to monitor thousands of miles of electrical or water infrastructure, often located in harsh environments through 3G and 4G cellular networks to provide remote assets monitoring and reliable and secure SCADA traffic backhauling. In many cases, these are power-constrained and space-constrained environments. Devices that enable this connectivity need to consume low power and monitor and manage the assets remotely. They also need to support traditional serial interfaces to interconnect with existing monitoring devices.

Oil and Gas

Oil and gas companies need to monitor pipeline infrastructure across wide geographic areas and remote locations in a power-constrained environment using 3G and 4G cellular networks to collect data from remote terminal units and securely transport SCADA traffic to a Network Operations Center (NOC).

Transportation

Highways and transportation agencies require reliable always-on communication between speed cameras, monitoring cameras, ticket terminals, and so on. Wireless devices to support such continuous communication need to support 3G and 4G networks to help ensure good, wide coverage; support continuous operation in very harsh environments; be very compact for deployment in roadside cabinets and ticketing machines; and support serial interfaces to existing traditional devices.

Primary Features and Benefits

Table 1 lists the features and benefits of the IR807.

Table 1. Features and Benefits of Cisco 807 Industrial Integrated Services Router

Features	Benefits
IoT enablement	
Lightweight, compact, and ruggedized form factor	In addition to being compact in size, the IR807 carriers all the Input/Output (I/O) ports and connectors on the front panel for easy installation inside cabinets. The router is hardened and ingress protection (IP) 30-rated for deployment in harsh environments for remote assets monitoring and machine-to-machine (M2M) communications.
Low power consumption	With a typical power consumption of 6.7W with traffic, the IR807 is designed to work in power-constrained environments.
Raw socket transport and SCADA	Raw socket can be used to transport SCADA data from RTUs. This method is an alternative to the Block Serial Tunnel (BSTUN) protocol. The IR807 provide DNP3 serial–to–DNP3/IP translation and IEC 60870 T101–to–IEC 60870 T104 protocol translation to serve as a SCADA gateway to do the following: ● Receive data from RTUs (T101 or DNP3 serial) and relay configuration commands from the control center (T104 or DNP3 IP) SCADA applications ● Receive configuration commands from the control center and relay RTU data to the control center ● Terminate incoming T104 or DNP3 IP requests from the control center when an RTU is offline
IoT field network director	Available as an optional industrial operations kit. This software platform manages a multiservice network and security infrastructure for IoT applications such as transportation, smart grid, services, distribution automation, and substation automation.
Multiple mounting options	● Supports a variety of mounting options: floor mount, wall mount, and DIN rail mount
Increased performance to run concurrent services	● Performance allows customers to take advantage of broadband network speeds while running highly secure, concurrent data, voice, and video services
Enhanced security	● An integrated state-full and application inspection firewall provides network perimeter security, hardware-assisted high-speed IP Security (IPsec), Triple Data Encryption Standard (3DES), and next-generation encryption protocols such as Advanced Encryption Standard (AES) and Secure Hash Algorithm (SHA) offer data privacy over the Internet ● Intrusion prevention enforces security policies in a larger enterprise or service provider network

Features	Benefits
Multiple WAN and LAN connections	
Two fast Ethernet interfaces	• Allows multiple Ethernet device connectivity in a small office or other remote location with the capability to designate a port as the network edge • Provides VLANs for Layer 3 IP sub-interfaces
Transparent roaming between wireless networks	
Dual subscriber-identity-module (SIM) support	• The dual SIM feature provides active/backup connectivity option for high reliability and multi-homing capabilities over LTE and HSPA networks
Cisco IOS® mobile IP features	• Mobile IP offers transparent roaming for mobile networks, establishing a transparent Internet connection regardless of location or movement. This feature enables mission-critical applications to stay connected even when roaming between networks • Assigned IP addresses to the home network are maintained in private and public networks • Both proxy mobile IP (PMIPv6) and network mobility (NEMO) are supported
Cisco IOS mobile network features	• This feature allows an entire subnet or mobile network to maintain connectivity to the home network while roaming
Multiple wireless WAN technologies	• Users can use the best wireless (4G LTE, 3.7G, 3.5G, 3G, or 2G) technology or network available. IR807G-LTE-VZ-K9 does not support 3G and 2G. IR807G-LTE-NA-K9 does not support 2G
Advanced IP services in standards-based Cisco IOS Software	
Advanced security features	• Authorization and authentication determine which individuals and devices have access to the network • Firewall protection provides perimeter security when public networks are used • 3DES and AES encryption provide highly secure VPNs when data is transmitted and received over public networks • The next-generation protocol suites enable users to monitor potential malicious activity on the network • IPsec over IPv4 & IPv6, IPsec stateful failover, VRF-aware IPsec, DMVPN, FlexVPN and PMIPv6
Routing	• Enables advanced routing capabilities using Enhanced Interior Gateway Routing Protocol (EIGRP), Multiprotocol Border Gateway Protocol (MP-BGP), IPv4 and IPv6 on all interfaces including cellular, IPv4/IPv6 Multicast, Generic Routing Encapsulation (GRE) and Multipoint GRE (MGRE), Network Address Translation (NAT), Domain Name System (DNS) proxy and spoofing, IP service-level agreement (SLA), and QoS
QoS features	• Provides traffic precedence to delay-sensitive and mission-critical services • Facilitates low-latency routing of delay-sensitive industrial applications • Supported on all LAN and WAN interfaces including cellular • Provides LTE QoS with support for up to 8 concurrent bearers on each cellular WAN interface for traffic classification and prioritization
Management and manageability	• Network managers can remotely manage and monitor networks with Simple Network Management Protocol Versions 1, 2, and 3 (SNMPv1, v2, and v3); Telnet; and HTTP/HTTPS and Secure Shell Version 2 (SSHv2). They can also manage and monitor networks locally through a console port • Support for extensive 3G and 4G LTE-based MIBs allows centralized management of remote devices and gives network managers visibility into and control over the network configuration at the remote site • Network managers can reset to a predesignated golden image, as well as configure an IR807 through Cisco IOS Software or through an external reset button • Network managers can upgrade 3G, 3.5G, 3.7G, and 4G LTE firmware and router configurations remotely • The tight integration with Cisco IOS Software enables the router to self-monitor the LTE WAN link and automatically recover from a radio link failure • Network management tools such as Cisco IoT Field Network Director (FND), Cisco Prime, Cisco Plug and Play (PnP), and APIC-EM simplify deployment of a secure network headend using the Cisco Industrial Operations Kit

Product Specifications

Table 2 provides 4G LTE specifications for IR807.

Table 2. 4G LTE Specifications for Cisco 807 Industrial Integrated Services Routers

Region theaters	IR807G-LTE-GA-K9	IR807G-LTE-NA-K9	IR807G-LTE-VZ-K9
Bands	LTE bands 1, 3, 7, 8, and 20; UMTS/HSPA+ bands 1 (2100 MHz) and 8 (900 MHz); EDGE/GSM/GPRS 900 MHz and 1900 MHz	LTE bands 2, 4, 5, 12, 17, 25, and 26; UMTS/HSPA+ 2 (1900 MHz), 4 (1700 MHz) and 5 (850 MHz);	LTE bands 4 and 13
Theoretical download and upload speeds*	100 and 50 Mbps	100 and 50 Mbps	150 and 50 Mbps
Australia	No	No	No
Europe	Yes	No	No
Middle East	No	No	No
Latin America (LATAM) and Asia-Pacific (APAC)	No	No	No
United States	No	Yes (ATT)	Yes (Verizon)
Canada	No	In the future	No

Feature	Description
Key cellular features	• Dual SIM for failover from active to backup network for high reliability • LTE QoS with support for up to 8 concurrent bearers on each cellular WAN interface for traffic classification and prioritization • Multiple Packet Data Networks (PDNs) • Automatic switchover and failover between primary and backup links • IPv4 and IPv6 support • Multichannel Interface Processor (MIP) profile configuration • Send and receive Short Message Service (SMS; maximum 160 characters) • 4G and 3G MIB with extension and traps • Remotely initiated data callback using SMS • Remote firmware upgrade over 4G LTE • Virtual diagnostic monitoring • Mobile Equipment Personalization (MEP) lock and unlock capabilities • SIM lock and unlock capabilities
Dual SIM support 	• High reliability and cellular multi-homing support for dual SIM card socket; compliant with ISO-7816-2 (SIM mechanical). This feature is not available on IR809G-LTE-VZ-K9 • Capability for the two SIMs to operate in active-backup mode
Global Positioning System (GPS) 	• Standalone GPS and National Marine Electronics Association (NMEA) streaming
SMS 	• Send and receive SMS for alerts and notifications
MIBs 	• Enhanced 3G MIB with 4G MIB extension (4G LTE parameters are covered with 3G MIB and 3G MIB extension) • ENTITY MIB • IF MIB • 3G Wireless WAN (WWAN) MIB persistence

Item	Specification
4G LTE network management and diagnostics	• In-band and out-of-band management using Telnet (Cisco IOS Software command-line interface [CLI]) and SNMP, including MIB II and other extensions • Industry-standard 4G LTE diagnostics and monitoring tools (QUALCOMM CDMA Air Interface Tester [CAIT] and Spirent Universal Diagnostic Monitor [UDM])
Programming interfaces	• Cisco IOS Software CLI
Wireless technologies supported (performance and throughput)	**IR807G-LTE-GA-K9** Cisco LTE 800 MHz (band 20), 900 MHz (band 8), 1800 MHz (band 3), 2100 MHz (band 1), and 2600 MHz (band 7) at Category 3 LTE speeds[2] Backward compatibility: • UMTS and HSPA+: 900 and 2100 MHz • Quad-band EDGE, GPRS, and GSM: 900 and 1900 MHz • HSPA+ speed DL up to CAT 20 (42.2 Mbps) and UL up to CAT 6 (5.76 Mbps) • DC-HSPA+ speed DL with CAT 24 (42.2 Mbps) and UL up to CAT 6 (5.76 Mbps) **IR807G-LTE-NA-K9** Cisco LTE 1900 MHz (band 2 PCS), 1700/2100 MHz (band 4 AWS), 850 MHz (band 5 and band 26 Extended CLR) and 700 MHz (band 12 and 17) at Category 3 LTE speeds[2] Backward compatibility: • UMTS and HSPA+: 850 (band 5), 1700/2100 (band 4 AWS) and 1900 (band 2) • CDMA: BC0, BC1, and BC10 • HSPA+ speed DL up to CAT 20 (42.2 Mbps) and UL up to CAT 6 (5.76 Mbps) • DC-HSPA+ speed DL with CAT 24 (42.2 Mbps) and UL up to CAT 6 (5.76 Mbps) **IR807G-LTE-VZ-K9** Cisco LTE 700 MHz (band 13) and 1700/2100 MHz (band 4 AWS) at Category 4 LTE speeds[2]
LED indicators	• SYS (green and yellow) • VPN (green) Cellular LEDs: • Received-signal-strength indication (RSSI; green) • WWAN (green) • SIM status (green) • GPS (green)

[2] LTE CAT 3 and CAT 4 download and upload speeds depend on specific carrier channel bandwidth and network provisioning.

Table 3 lists the software features supported on IR807.

Table 3. Cisco IOS Software features on Cisco 807 Industrial Integrated Services Routers

Feature	Description
Cisco IOS Software requirements	• Cisco IOS Software feature set: Universal Cisco IOS Software image • Cisco IOS Software Release 15.7(3)M1 or later
IPv4 and IPv6 services features	• Routing Information Protocol Versions 1 and 2 (RIPv1 and RIPv2) • Generic Routing Encapsulation (GRE) and Multipoint GRE (MGRE) • Cisco Express Forwarding • Standard 802.1d Spanning Tree Protocol • Network Address Translation (NAT) • Dynamic Host Configuration Protocol (DHCP) server, relay, and client • Dynamic DNS (DDNS) • DNS proxy • DNS spoofing • Access Control Lists (ACLs) • IPv4 and IPv6 multicast • Open Shortest Path First (OSPF) • Border Gateway Protocol (BGP) • Enhanced Interior Gateway Routing Protocol (EIGRP) • Virtual Route Forwarding (VRF) Lite • Next-Hop Resolution Protocol (NHRP)

Feature	Description
Security features	**Secure connectivity** ● Secure Sockets Layer (SSL) VPN for secure remote access ● Hardware-accelerated DES, 3DES, AES 128, AES 192, and AES 256 ● Public-Key-Infrastructure (PKI) support ● 20 IPsec tunnels ● Cisco Easy VPN Solution client and server ● NAT transparency ● Dynamic Multipoint VPN (DMVPN) ● Tunnel-less Group Encrypted Transport VPN ● Flex VPN ● IPsec state-full failover ● VRF-aware IPsec ● IPsec over IPv6 **Cisco IOS Firewall** ● Zone-based policy firewall ● VRF-aware state-full inspection routing firewall ● State-full inspection transparent firewall ● Advanced application inspection and control ● Secure HTTP (HTTPS), FTP, and Telnet Authentication Proxy ● Dynamic and static port security ● Firewall state-full failover ● VRF-aware firewall **Integrated Threat Control** ● Control-Plane Policing (CoPP) ● Flexible packet matching ● Network foundation protection
QoS features	● Low Latency Queuing (LLQ) ● Weighted Fair Queuing (WFQ) ● Class-Based WFQ (CBWFQ) ● Class-Based Traffic Shaping (CBTS) ● Class-Based Traffic Policing (CBTP) ● Policy-Based Routing (PBR) ● Class-Based QoS MIB ● Class of Service (CoS)–to–Differentiated Services Code Point (DSCP) mapping ● Class-Based Weighted Random Early Detection (CBWRED) ● Resource Reservation Protocol (RSVP) ● Real-Time Transport Protocol (RTP) header compression (cRTP) ● Differentiated Services (DiffServ) ● QoS pre-classify and pre-fragmentation ● Hierarchical QoS (HQoS)
Management features	● Cisco IoT Field Network Director and Industrial Operations Kit ● Cisco Configuration Professional Express* ● Cisco Kinetic* (cloud-based gateway management) ● Cisco Plug and Play (PnP) ● Cisco Application Policy Infrastructure Controller Enterprise Module (APIC-EM) ● Cisco Prime ● Jasper Control center ● IP Service-Level Agreement (IP SLA) ● Cisco IOS Embedded Event Manager (EEM) ● Telnet, SNMPv3, SSH Protocol, CLI, and HTTP management ● RADIUS and TACACS+ * - Support available in Q1 2018
High-availability features	● Virtual Router Redundancy Protocol (VRRP) (RFC 2338) ● Hot Standby Router Protocol (HSRP) ● Dual SIM support for cellular failover (not supported on IR807G-LTE-VZ-K9)

Feature	Description
IPv6 features	• IPv6 addressing architecture • IPv6 unicast and multicast forwarding • IPv6 ACLs • IPv6 over cellular • IPv6 routing • IPv6 domain name resolution

Table 4 lists the system specifications, and Table 5 lists antenna specifications for the IR807.

Table 4. System Specifications for Cisco 807 Industrial Integrated Services Routers

Feature	Specification
Memory	
Default and maximum DRAM	1 GB
Default and maximum flash memory	4 GB
IP rating	IP30
Physical characteristics	
Physical dimensions (H x W x D)	1.84” x 5.07” x 4.37” (46.74 x 128.78 x 110.99 mm)
Weight	1 lb 5 oz. (0.6 kg)
Mounting options	Panel, wall, and DIN rail (vertical and horizontal) mount
Power consumption	At idle: 4.5W Typical: 6.7W Maximum: 10W
Interface support	
Console	Mini type-B USB
WAN interfaces	WWAN with multimode 4G LTE, 3.7G, 3.5G, 3G, and 2G speeds; IR807G-LTE-VZ-K9 does not support 3G and 2G. IR807G-LTE-NA-K9 does not support 2G
LAN and WAN interfaces	Two 10/100BASE-T fast Ethernet ports
LEDs	• System OK • WWAN • Link for Ethernet WAN ports • GPS • RSSI • VPN • User-configurable LED • SIM presence • ALARM
Serial interface	• 2 isolated RS-232 ports • Support for asynchronous mode with speed up to 115,200 baud
Serial protocol support	SCADA, DNP3, T101-104, Raw Socket TCP and UDP, and SLIP
Diagnostics	Mini type-B USB for remote cellular WAN diagnostics and monitoring
Environmental characteristics	
Environmental operating temperature range	–40 to 140°F (–40 to 60°C) in a sealed NEMA cabinet with no airflow –40 to 158°F (–40 to 70°C) in a vented cabinet with 40 linear feet per minute (LFM) of air –40 to 167°F (–40 to 75°C) in a forced air enclosure with 200 LFM of air Type tested at 85°C for 16 hours
Operating altitude	50ºC up to 5000 ft (above 5000 ft derate maximum operating temperature 1.50°C per 1000 ft) Maximum altitude: 10,000 ft
Standard safety certifications	• UL 60950-1, 2nd edition • CAN/CSA C22.2 No. 60950-1, 2nd edition • EN 60950-1, 2nd edition • CB to IEC 60950-1, 2nd edition with all group differences and national deviations

Feature	Specification
Hazardous locations standards	• ANSI/ISA 12.12.01 (Class 1, Div 2 A-D) • CSA 213 (Class 1, Div 2 A-D) • IEC 60079-0 and -15 IECEx test report (Class I, Zone 2, gas groups IIC) • EN 60079-0 and -15 ATEX certification (Class I, Zone 2, gas groups IIC)
Industry standards	• IEC 61850-3 • IEEE 1613
EMC emissions	FCC 47 CFR Part 15 Subpart C Class A EN 55032/CISPR 32 Class A, EN 55022 Class A CISPR 11 Class A, ICES 003 Class A, CNS 13438 Class A EN 300 386
EMC immunity	CISPR 35, EN 55024 EN 61000-4-2, 3, 4, 5, 6, 8, 9, 16, 17, 18, and 29
Radio cellular	EN 301 908 -1, 2, and 13 EN 301 511 FCC 47 CFR Part 22 FCC 47 CFR Part 15 Subpart C FCC 47 CFR Part 2 MPE RSS 102/247
Power specifications	Minimum and maximum voltage: 9.6 to 60V DC input Maximum and minimum current: 1.04A (9.6V DC) and 0.17A (60V DC)

Ordering Information

For more information about ordering the IR807, visit the Cisco Ordering homepage and refer to Table 5.

Table 5. Ordering Information for Cisco 807 Industrial Integrated Services Routers

Product	Description
Cisco IR807G 4G LTE Integrated Services Routers	
IR807G-LTE-GA-K9	Compact Cisco IR807 Ruggedized Secure Multi-Mode 4G LTE Industrial ISR for Europe: Multimode 4G, 3G, and 2G connectivity to cellular networks operating in LTE 800 MHz (band 20), 900 MHz (band 8), 1800 MHz (band 3), 2100 MHz (band 1), and 2600 MHz (band 7) frequencies Backward-compatible with UMTS and HSPA+ 900 MHz (band 8) and 2100 MHz (band 1) and EDGE/GSM/GPRS 900 MHz and 1800 MHz
IR807G-LTE-NA-K9	Compact Cisco IR807 Ruggedized Secure Multi-Mode 4G LTE Industrial ISR for North America: Multimode 4G and 3G, connectivity to cellular networks operating in LTE 1900 MHz (band 2 PCS), 1700/2100 MHz (band 4 AWS), 850 MHz (band 5), 700 MHz (band 12), 700 MHz (band 17), 1900 MHz (band 25 extended PCS) and 850 MHz (band 26 extended CLR) frequencies Backward-compatible with UMTS and HSPA+ 850 MHz (band 5), 1900 MHz (band 2 PCS), and 1700/2100 MHz (band 4 AWS), and CDMA BC0, BC1 and BC10
IR807G-LTE-VZ-K9	Compact Cisco IR807 Ruggedized Secure 4G LTE Industrial ISR for Verizon in North America: LTE connectivity to cellular networks operating in LTE 700 MHz (band 13) and 1700/2100 MHz (band 4 AWS)
Power supplies and mounting brackets	
PWR-IE50W-AC-L(=)	AC power adapter with 110/240V AC and 90-264V input (operating temperature: -20C to +70C) For more details on this power supply, visit: https://www.cisco.com/c/en/us/products/collateral/switches/industrial-ethernet-switches/datasheet-c78-742180.html
IR807-DINRAIL(=)	DIN rail kit
IR807-WALLMNT(=)	Wall mount kit
Antenna and lightning arrestors	
Refer to Cisco IR800 Series Antenna Install Guide at https://www.cisco.com/c/dam/en/us/td/docs/routers/access/800/829/ir800_antenna_install_guide.pdf. **Note:** None of the antennas are included by default along with the IR807.	

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For More Information

For more information about the Cisco 807 Industrial Integrated Services Routers, visit https://www.cisco.com/go/ir807 or contact your local Cisco account representative.

Cisco and Partner Services for the Enterprise Networks Architecture

Enable the Cisco Enterprise Networks Architecture and the business solutions that run on it with intelligent, personalized services from Cisco and our partners. Backed by deep networking expertise and a broad ecosystem of partners, these services can help you plan, build, and run a network that enables you to expand geographically, adopt new business models, and promote business innovation. Whether you are seeking to transition to a Cisco ONE™ enterprise networks architecture, solve specific business problems, or improve operation efficiency, we have a service that can help you get the most from your IT environment. For more information, visit https://www.cisco.com/go/services.

Warranty Coverage and Technical Service Options

The IR807 comes with the Cisco 5-year limited hardware warranty. Adding a contract for a technical service offering, such as Cisco SMARTnet® Service, provides benefits not available with the warranty, including access to OS updates, Cisco.com online resources, and Cisco Technical Assistance Center (TAC) support services. Table 6 shows the available technical services.

For information about Cisco warranties, visit https://www.cisco.com/go/warranty.

For information about Cisco Technical Services, visit https://www.cisco.com/go/ts.

Table 6. Cisco Technical Services for the Cisco 807 Industrial Integrated Services Routers

Technical services
Cisco SMARTnet Service • Global access to the Cisco TAC 24 hours a day • Unrestricted access to the extensive Cisco.com resources, communities, and tools • Next-Business-Day (NBD), 8 x 5 x 4, 24 x 7 x 4, and 24 x 7 x 2 advance hardware replacement and onsite parts replacement and installation available[1] • Ongoing operating system software updates within the licensed feature set[2] • Proactive diagnostics and real-time alerts on Cisco Smart Call Home-enabled devices
Cisco Smart Foundation Service • NBD advance hardware replacement as available • Business-hours access to Small and Medium-sized Business (SMB) Cisco TAC (access levels vary by region) • Access to Cisco.com SMB knowledge base • Online technical resources through the Cisco Smart Foundation portal • OS software bug fixes and patches

[1] Advance hardware replacement is available in various service-level combinations. For example, 8 x 5 x NBD indicates that shipment is initiated during the standard 8-hour business day, 5 days a week (the generally accepted business days within the relevant region), with NBD delivery. Where NBD is not available, same-day shipment is provided. Restrictions apply; review the appropriate service descriptions for details.

[2] Cisco OS updates include maintenance releases, minor updates, and major updates in the licensed feature set.

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