


[Products](#) [Cellular Routers](#) IRG7000

Print PDF

# IRG7000 5G Routers

## Enterprise-Class Edge 5G Router & Gateway


[Get a quote](#)

- 5G Router for Primary or Failover Connectivity
- Cellular Band Operation Certified Worldwide over 5G NR with fallback to 4G CAT20 LTE & 3G
- Out of band management for remote troubleshooting
- [Cloud Hosting](#) -- Deploy and manage your network from the cloud
- 4-port 10/100/1000 Ethernet
- Network connectivity via 5G, Ethernet, USB, and Serial
- RS232, RS485, Alarm Relay, and multiple I/O to connect equipment
- **Advanced feature set with NO Annual Fees**

[Overview](#)
[Features](#)
[Hardware Specs](#)
[Application Diagrams](#)
[Documentation](#)
[Ordering Details](#)

**Perle IRG7000 5G Routers and Gateways** have the most comprehensive set of features, functionality, and performance to provide **primary or back-up 5G connectivity** to remote infrastructure and assets. These ultra-low-power, rugged, high-performance Cellular Routers can be quickly and easily deployed using an intuitive web GUI. For advanced admin scrips, RESTful API and CLI commands are also available.

Perle IRG7000 5G Routers provide **fast, secure, and reliable managed 5G network connectivity** where wired options are impossible to deploy or require a backup. This is crucial for enabling a wide range of applications while ensuring the highest degree of security to protect the integrity of critical services. Reduce the cost of downtime and service calls, and bringing distributed sites online faster. With support for **Data, SMS, Voice, and Video**, an IRG7000 and can be integrated into any enterprise cloud, building, industrial, or mobile location network infrastructure.



- Building and process automation controllers, Internet of Things (IoT)
- Smart grid assets (meters, switches, controllers), Telco infrastructure controllers
- SCADA, Distribution management systems, Remote data loggers, flow meters, sensing equipment
- Digital signage, ATMs, POS, Kiosks, Temporary "pop-up" stores
- Video surveillance controllers, IP cameras, Mobile hotspots
- Fleet management, GPS/GNSS Location tracking, Taxis, Public Service Vehicles, vehicle area networking (VAN)
- Public Service Vehicles, First responders, Command Centers
- Transit systems, Buses, Metro Subways, Railways

## Edge Routers with Enterprise-Grade Routing Capabilities

**Perle does not charge any annual subscription or license fees** to maintain operation, download software updates, or access features. IRG7000 routers have all the of the routing functionality found in the most advanced enterprise routers included in the base price of the product. Extensive routing protocol support means they can be easily deployed in hierarchical or large mesh network structures. A fast CPU and lots of memory ensure the router can handle a consistent and heavy workload all day long.

- RIP, RIPv2, RIPng, OSPFv1/2/3, BGP-4, VRRP
- When BGP peering with multiple ISPs, the IRG5500 delivers carrier-grade routing performance capable of handling the full Internet routing table
- IPv4 & IPv6
- OpenVPN & IPSec VPN
- DHCP & DHCPv6
- IP Passthrough for deployments requiring the router to operate in Gateway or Bridge mode
- Route between any interface (Cellular, Ethernet, USB, or serial RS232)
- Reduce unwanted network traffic by creating collision and/or broadcast domains



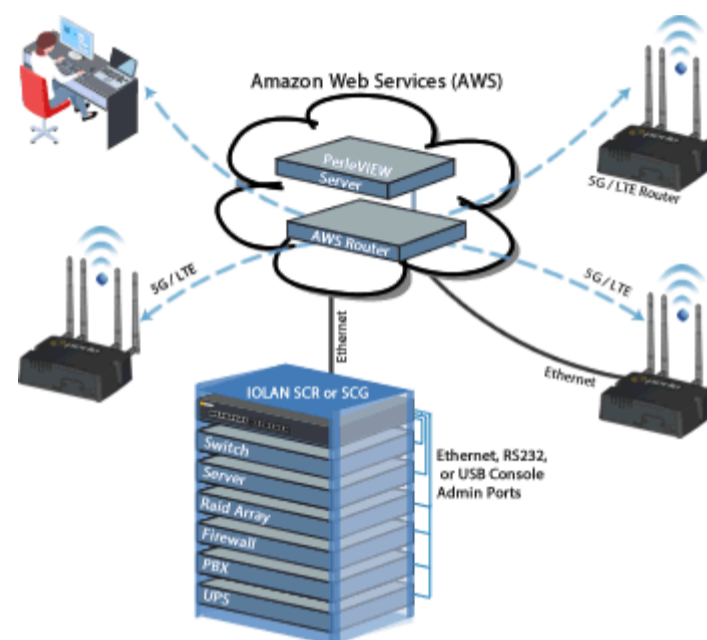
## Integrated Zone-Based Policy Firewall

The IRG7000 built-in firewall offers intuitive policies for multiple-interface routers to **protect inside networks from unauthorized access** by users on an outside network. The firewall also protects inside networks from each other, for example, by keeping a human resources network separate from a user network. If there are network resources that need to be available to an outside user, such as a web or FTP server, these resources can be placed on a separate network behind the firewall, in a demilitarized zone (DMZ). The firewall will allow limited access to the DMZ, but because the DMZ only includes the public servers, any attacks there will not affect the inside network. The firewall controls when inside users access outside networks (for example, access to the Internet), by allowing only certain addresses out, by requiring authentication or authorization, or by coordinating with an external URL filtering server. A deny-all (blacklist) policy can be used to prohibit traffic between firewall security zones until an explicit policy is applied to allow desirable traffic. Router ports are assigned to zones and firewall inspection policies are applied to traffic moving between the zones. Firewall inter-zone policies come with considerable flexibility and granularity so that different firewall inspection policies can be applied to the same router port.

## High Availability Access and Enhanced Security with 2 Factor Authentication

With multiple concurrent VPN sessions and 2 Factor Authentication, Perle IRG7000 Routers enable secure communications to multiple back-end systems.

- Remote authentication (RADIUS, TACACS+, LDAP) management, integrates with enterprise-grade systems to control access to devices in the field.
- Software image CRC control protects the software upgrade process against unwanted software corruption and malware
- High-speed OpenVPN, IP Security (IPsec), Triple Data Encryption Standard (3DES), and Advanced Encryption Standard (AES) encryption for data privacy over the Internet.
- Intrusion prevention enforces security policies in a large enterprise or service provider networks.
- Perle's cloud-based centralized management solution puts all your network and IT infrastructure into a single application and provides secure reliable access and visibility during normal operations and critical network failures. Scalable to suit any business requirement, [Cloud Centralized Management](#) reduces human error and guarantees repeatability.




## GPS / Global Navigation Satellite System (GNSS) Included

GNSS (GPS, Galileo, and Glonass) are included by default in all IRG7000 Routers and Gateways. This enables **real-time location tracking** of remote assets. Also, you can get **real-time network clock updates** in the router, or any attached equipment, for accurate time-stamp usage in time-sensitive applications.

## Cutting-edge design certified for a wide range of deployment scenarios

High-performance components and features enable customers to take advantage of broadband network speeds while running **secure concurrent data, voice, and video services**. All IRG7000 routers have **high MTBF rates** because they are developed with certified high-end components to provide superior reliability and uninterrupted operation.

<p><b>Primary or failover back-up connectivity</b></p>	<p>Perle is the only company to offer 5G edge routers with all of the enterprise-grade features and protocols needed to be a fully functional primary or failover back-up 5G Router. If the main network connection goes down for any reason, Perle IRG7000 5G routers provide an always-on, cost-effective redundant connection. As a failover solution, wireless speeds are fast enough to keep your network humming and distributed enterprises can enjoy the same reliability and competitive advantage as large enterprises. The relatively low cost of 5G for branch continuity means a greater return on investment and scalability for multiple locations. Simply put, an IRG7000 5G Router ensures maximum uptime, cost-effective scalability, and ease of deployment and management with limited IT resources.</p>
<p><b>Compact light-weight design</b></p>	<p>Deploy in many different environments where space, heat dissipation, and low power consumption are critical factors. The optional DIN-Rail mounting brackets or wall-mount brackets ensure easy installation.</p> 

<b>Ultra-Low-Power</b>	IRG7000 5G Routers are designed to operate on limited power sources by consuming less than 1 Watt in idle mode. This makes them ideal for battery and solar applications. In addition, Standby Mode can be used to protect power sources by dropping power consumption to a target of 52 mW. This can be triggered by timers, low voltage detection, or I/O. IRG7000 Routers also work with the existing power infrastructure in 4G/3G deployments that are migrating to 5G thus, eliminating the need to invest in replacement equipment.
<b>Rugged Environment Certifications</b>	<ul style="list-style-type: none"> <li>• Rugged die-cast aluminum IP54 enclosure for dust &amp; water ingress</li> <li>• Shock and vibration resistance certified to MIL-STD-810G</li> <li>• 40°C to 70°C / -40°F to 158°F operating temperature</li> </ul>
<b>Mobility Support</b>	<ul style="list-style-type: none"> <li>• Cellular tower connectivity can be established and maintained at up to 100 meters per second (360km/224mi per hour)</li> <li>• Built-in battery charge protection, with no requirement for external power conditioning</li> <li>• Ignition Power Management can schedule a delayed shutdown or start-up of the IRG7000 based on the vehicle ignition status</li> </ul>

## More Features and Benefits

<b>WAN Connectivity</b>	5G and 10/100/1000 Ethernet
<b>Central Management Configuration</b>	<p>Perle IRG7000 Routers and Gateways use <a href="#">PerleView</a>, a web-based server configuration tool that simplifies setup and deployment. Centralized management capabilities give network managers visibility and control over network configurations at remote sites. Other Perle IRG7000 management capabilities include:</p> <ul style="list-style-type: none"> <li>• Fast Setup - Available when the router is in factory default (initial) configuration</li> <li>• Web Manager - Available using a browser</li> <li>• CLI - Command Line Interface</li> <li>• RESTful API - a standard for interactive Web services</li> <li>• SNMP - Using a Network Management System</li> <li>• <b>No ongoing monthly or yearly licensing fees.</b></li> </ul>
<b>Serial Port</b>	<p>Perle IRG7000 Routers come with an IOLAN Secure Device Server built-in for a secure serial to IP (Ethernet/Cellular) connectivity applications. This makes it ideal for applications that require remote device console management, data capture, or monitoring. Some of the supported applications are:</p> <ul style="list-style-type: none"> <li>• <a href="#">TrueSerial® packet technology</a> delivers the most authentic serial connections across Ethernet for serial protocol integrity.</li> <li>• Serial Port Access: connect directly using Telnet / SSH</li> <li>• Terminal Server: Telnet, SSH, Rlogin, LPD, RCP printer</li> <li>• Serial machine to IP (Ethernet)</li> <li>• Raw serial data over Ethernet/Cellular/TCP/IP/UDP</li> <li>• Virtual modem simulation</li> <li>• TruePort redirector</li> <li>• ModBus, DNP3 and IEC-870-5-101 encapsulation</li> <li>• Line access permissions via TACACS+ and RADIUS servers</li> <li>• Dial direct serial: PPP, PAP/CHAP, SLIP</li> </ul>

[Back To Top](#)

- [Products](#)
- [Applications](#)
- [About Perle](#)

- [Contact Us](#)
- [How to Buy](#)
- [Technical Support](#)

- [Site Map](#)
- [Legal Information](#)
- [Privacy & Cookie Policy](#)

Products by Perle



**Follow Perle**

Copyright © 1996 - 2022 Perle. All Rights Reserved

**Send us an Email**

×

Have a Question?

We can provide more information about our products or arrange for a price quotation.

Send an Email

[Call Us](#)