

Hera

200 SERIES



Product overview

Eseye's Hera 200 series is an entry level 3G/4G WiFi router range that enables secure, reliable and resilient global connectivity for your IoT machines, systems or remote assets.

Highly adaptable and encryption-capable, the Hera is designed to provide secure cellular, WiFi and Ethernet access options to thousands of globally-deployed IoT devices.

Coupled with award-winning AnyNet+ eUICC SIM technology, Infinity IoT Connectivity Management Platform and Eseye-managed services, the Hera enables remote monitoring, access, and over-the-air (OTA) configuration of connected equipment, without physically mobilising staff and resources to sites.

The Hera is compact and encased in rugged aluminium for durability, allowing remote deployment in outdoor cabinets. The direct mounting ensures easy and secure installation.

Product description

Eseye's Hera 200 series routers are designed to simplify IoT device connectivity to customer systems and the cloud, ensuring that network connections are reliable, and data transfer is secure and resilient.

Hera 200 series routers provide simple, robust integration across varied IoT deployments where single data communications paths are required, including home automation, smart agriculture, the hospitality sector, and remote monitoring for heating and ventilation systems.

The Hera router integrates with Eseye's Infinity IoT Connectivity Management Platform for data management and monitoring purposes. Using Infinity, device data is transparently accessible, and enables intelligent condition monitoring and alert notifications.

Coupled with an AnyNet SIM, Hera routers enable IoT devices to automatically connect across 190 countries worldwide and achieve near 100% connectivity via over 700 mobile (2G, 3G, 4G/LTE) networks. Optimised with over-the-air (OTA) network switching, zero-touch management and advanced security features that include private APN and VPN connections, the AnyNet SIM reduces both the risk and total cost of ownership of your global IoT deployment. Firmware updates are easily sent OTA to the Hera router when new functionality becomes available.

Hera 204 model router components

- Dual-SIM cellular connectivity
- Embedded AnyNet+ eUICC SIM for near 100% connectivity
- Access and management for all available 2G/3G/4G(LTE) cellular networks globally
- One fast Ethernet port and optional 802.11ac 2.4Ghz / 5Ghz non-concurrent WiFi
- Local and remote management provisioning via TR.069, SSH, CLI, HTTP, HTTPS, or SMS
- Cat 4 LTE module, delivering 150 Mbps Downlink and 50 Mbps Uplink
- Embedded security with IP filtering, stateful inspection firewall, and NAT/NAPT
- AnyNet SMARTconnect™ integration to simplify and manage secure, reliable connectivity and service availability across cellular networks
- VLAN support for simplified network design and separation
- Industry compliance, meeting all core requirements for CE and FCC

All of these features are wrapped in a compact and robust aluminium casing for easy integration, or for retro-fitting into an existing infrastructure.

Architecture and key features

The Hera is designed to deliver life-long zero-touch service, with highly resilient data connectivity delivered within M2M grade hardware in a robust aluminium casing. This makes it an ideal high-speed 3G/4G network failover solution.

Architectural highlights

- Cat 2G, 3G and Cat 4 LTE support
- Dual-SIM
- Optional 802.11ac 2.4Ghz / 5Ghz non-concurrent WiFi
- One integrated 10/100baseT/TX Ethernet ports
- Post-installation management and reconfiguration

Highly available

Coupled with an AnyNet SIM, Hera 200 series routers can connect globally across 190 countries via 700 mobile (2G/4G/LTE) networks, ensuring near 100% connectivity. The Hera 204 model router has optional 802.11ac 2.4Ghz / 5Ghz non-concurrent WiFi capability and 2G/3G/4G fallback for post installation management and reconfiguration. It is fitted with one fast (100 Mbps) Ethernet port.

Easy onboarding

Hera 200 series routers are preconfigured to the customer's unique specifications for easy deployment. It will connect to a local network, ready to receive and send your IoT device data.

Intelligent device monitoring

Using the Hera together with Eseye's Infinity IoT Connectivity Management Platform, your IoT device data is transparently accessible, enabling intelligent condition monitoring and alert notifications. Infinity offers comprehensive connectivity management and SIM performance assurance.

Secure

- Embedded security with:
 - *IP filtering* – to control network traffic
 - *Stateful inspection firewall* – to monitor the state and context of network traffic, give granular control over how this traffic is filtered, and detect security threats
 - *NAT/NAPT* – to prevent unauthorised access to devices, ensure IoT project scalability at minimal cost, allow connection flexibility across the available mobile networks, and ensure continued connectivity in the event of a network failure

VLAN support

For increased network performance and security, offering more flexibility than non-virtual networking solutions for network configuration and workgroup formation, and reducing the overall administrative effort to manage services and devices.

Easy device configuration and monitoring

The Hera has a GUI-based device-management tool to simplify configuration, deployment, monitoring and troubleshooting.

The Health Monitor application in the Hera router continually checks that a connection is performing as expected. It automatically detects any changes in the performance of a connection and alters the connectivity preferences to enable seamless self-managing failover. Customers can configure the Health Monitor to:

- Detect failed system polls on WAN interface restart or router reboot
- Detect failed interface tests
- Send ping and DNS requests
- Select the best WAN interface
- Provide editable and read-only WAN interface information on priority, interface, IP address, DNS, and other actionable features
- Apply overrides for each WAN interface

Technical specifications

Cellular	<ul style="list-style-type: none"> Dual SIM, including embedded AnyNet SIM Receiver Diversity Support 2G/3G/LTE support
LTE Models	<p>USA only</p> <ul style="list-style-type: none"> LTE FDD 1900(B2)/1700(B4)/850(B5)/700(B12)/700(B13)/700(B14)/1900(B25)/850(B26)/1700(B66)/600(B71) UMTS 1900(B2)/1700(B4)/850(B5) Cat 24 3G up to 42 Mbps Downlink/ 5.72 Mbps Uplink <p>RoW</p> <ul style="list-style-type: none"> LTE FDD 2100(B1)/1800(B3)/2600(B7)/900(B8)800(B20)/700(B28) UMTS 2100(B1)/900(B8) GSM/GRPS E-GSM 900, DCS 1800 Cat 4 LTE up to 150 Mbps Downlink/ 50 Mbps Uplink Cat 24 3G up to 42 Mbps Downlink/ 5.72 Mbps Uplink
Serial Management (1 x Micro USB)	<ul style="list-style-type: none"> Baud Rate: 115200 Data format: 8 Bit; NParity; 1 Stop Bit
Ethernet LAN (4 x RJ45)	<ul style="list-style-type: none"> 10/100baseT/TX Auto MDI/MDIX
WLAN (optional)	<ul style="list-style-type: none"> 4 SSID WEP WiFi Protected Access (WPA) WPA2-Personal/Enterprise Auto-channel selection Auto-rate selection 2.4Ghz 2x2 and 5Ghz 2x2 non-concurrent 802.11ac 802.11n, 802.11a, 802.11b, 802.11g <p>IEEE</p> <ul style="list-style-type: none"> 802.11a up to 54 Mbps 802.11b up to 11 Mbps 802.11g up to 54 Mbps 802.11n up to 300 Mbps 802.11ac up to 867 Mbps
Data and Routing	<ul style="list-style-type: none"> PPP with PAP/CHAP security VLAN termination Up to 16 LAN subnets DHCP server, client, relay DNS client, relay Loopback Interfaces
Command Line Interface	via Telnet, SSH, Direct Serial
Firmware updates	via HTTP, HTTPS, FTP, TR.069
Diagnostics	via ICMP Ping, syslog, traceroute

Security	<ul style="list-style-type: none"> IP filtering NAT/NAPT (PAT) Port Forwarding Password access Configurable access controls Stateful inspection firewall DOS protection
Status LEDs	<p>System LEDs: Power, Wi-Fi, WAN and Signal.</p> <p>Ethernet ports: Link and Data</p>
General	<ul style="list-style-type: none"> Configurable SMS alerts and controls Device Health Monitor Connectivity and service supervision
Antennas	<ul style="list-style-type: none"> Cellular: 2 x 50 Ohm SMA WiFi: 2 x 50 Ohm SMA
Size	TBA mm
Product weight	TBA kg
Packaged weight	TBA kg
Input	12Vdc
Consumption	10W max
Connector	Molex Mini Fit Jnr
Operating temp	-20 to 55°C
Humidity	5 - 95% Rel. Hum.
Product	RoHS compliant; FCC and CE marked
Safety	IEC62368
EMC	<ul style="list-style-type: none"> Emissions Immunity
EN	<ul style="list-style-type: none"> EN 301 489-1 EN 301 489-17 EN 301 489-52 EN 300 328 EN 301 893 EN 301 908-1
FCC	<ul style="list-style-type: none"> 47CFR15.107 47CFR15.109 47CFR15.247 47CFR22 47CFR24 47CFR27
IC	<ul style="list-style-type: none"> ICES003 RSS-210 RSS-247 RSS-132 RSS-133 RSS-139

Ordering information

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