TeraHop networks

Mini Gateway Router
GR1100a

TeraHop Mini Gateway Router

FEATURES AND BENEFITS

Wireless Technology

*   Bi-directional wireless electronic device that communicates with TeraHop Networks' Controllers and PDCs to form a wireless network island
*   Upgradeable and scalable
*   Uses 2.4 GHz band

Networking

*   The MiniGR device supplies radio communications for Gateway Controllers via a high- capacity, high-reliability data link
*   The Network re-forms as resources move
*   The MiniGR is well suited for mobile and temporary installations as well as fixed installations of network islands

General

The TeraHop Mini Gateway Router (MiniGR) is the central control and information collection and dissemination device that links all components at a site. Mounted on a pole, building, or vehicle, the MiniGR announces its presence when first powered up and, within a few moments, the entire network of Portable Data Collectors (PDCs) is fully operational providing presence and condition of all on-site assets automatically.

Operation

The Mini Gateway Router is tethered to a user laptop via a standard USB cable to communicate with the network's controlling software and user application. The MiniGR is powered when the user laptop is turned on and the MiniGR creates an ad-hoc network covering over one square mile where it collects the status and condition of all PDCs located at the site. The PDC data is then communicated through the MiniGR to the application running on the user laptop where it is then stored and managed. The MiniGR and the associated application continuously monitor the status and condition of the PDCs and periodically confirm the radio link to and from each device. The MiniGR fully supports GPS capability through optional GPS modules attached to the associated laptop.

After a simple laptop log-in procedure, the MiniGR allows all of the PDCs to form an ad-hoc network and collect status, condition, and routing information from all devices at the site. One MiniGR can provide coverage over a 1 square mile area with coverage automatically extended through the hopping capability of the PDCs.

About TeraHop Networks

TeraHop Networks is a leading manufacturer of asset monitoring and portable networking devices. Companies in the construction, transportation, manufacturing, emergency response, and mining industries use TeraHop's patented, subscription-free technology to cut costs and reduce waste by monitoring the location and condition of their mobile assets and personnel. TeraHop products are ready to run right out of the box, without satellite, cellular, Wi-Fi, or cabled network communication infrastructure. Power options for TeraHop products include battery, vehicle, and line power. TeraHop provides hassle-free, reliable, and affordable asset management hardware that integrates with popular maintenance, monitoring, and tracking software platforms. Privately held, TeraHop has offices in Seattle, Washington and Alpharetta, Georgia. For more information, visit www.terahop.com, email info@terahop.com, or call (678) 455-8844.

Gateway Router
GR1100a
Technical Specifications

PHYSICAL CHARACTERISTICS:	RF CHARACTERISTICS:

Dimensions: 2.9" x 4.3" x 1.4"

Weight: 6.4 ounces

External Connections:
One (1) mini USB, weatherproof

Programming and I/O Port: (1) 16-pin for GPIO and serial connections. Used for configuration programming.

Comes with 15 ft USB cable with locking connector

Frequency/Range: 2.4 GHz, unlicensed (globally)

Antennas: Internal

Transceiver 1: 10/100 Ethernet

Transceiver 2: Class 1 Bluetooth*

Hopping (Wireless Routing): Up to 16 hops

RF Regulatory Compliance: FCC Part 15C, Class B

ENVIRONMENTAL PERFORMANCE:	RELATED PRODUCTS:

Operating Temperature:
-40°C to +85°C (-40°F to +185°F)

Acceptable Storage Temperature:
-25°C to +55°C (-13°F to +131°F)

Recommended Storage Temperature: 30°C

Humidity: 100%, condensing

Shock: 4-foot drop on concrete without damage

Immersion: 30 minutes in water of 1m per IP-67

Vibration: 30g, Z axis

Salt Fog: ASTM B 117-07 (21 days)

- TeraHop Gateway Router GR2100 (GR)
- TeraHop Portable Data Collector (PDC)
  - GPS Option
  - RFID Option
  - Locator Option
  - Sensor Options (Temp, Shock, Tilt, Run/Idle, etc)
- TeraHop IMX Server
- TeraHop Support, and Training

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