

Data Concentrator for RF Sensor Network

GHub is a wireless data concentrator for GTelemetry RF sensor networks. It automatically collects data from the RF devices of the wireless sensor network, which enables data reading from large groups of devices in a single click.



GHub can be programmed to collect and store data wirelessly, and transmit data quickly through mobile data terminals such as handheld computers, tablet PC, and PDAs, or over fixed or cellular telephone networks.

Based on ULP wireless technology, GT&T' RF device family have the characteristics of long life span, long transmission range, low cost and high reliability. Flexible GTelemetry topology allows you to quickly set up your own radio network and use GHub to collect data from end-points to optimize network performance. GHub is the ideal choice for large-scale remote data measurement & monitoring applications.

- Collect data from 100 end-points in one minute
- Scheduler operating mode with data record update and date/time stamp
- Battery life up to 7 years
- Forwards spontaneous alerts from network devices (including GHub itself)
- Increases efficiency of mobile data monitoring rounds
- Fully wireless configuration

TECHNICAL CHARACTERISTICS

- Radio transmission range:
 - between 25mW and 25mW: up to 1 km LOS
 - between 25mW and 500mW: up to 4 km LOS
- Receiver Sensitivity: -110 dBm (0.1% Frame Error Rate@ 9.6 kbps)
- ISM band 433/868/915 MHz
- Full Compatibility with the highly reliable GT&T ULP RF network
- Compliance:
 - EN300-220-1, FCC15-249
 - EMC: EN 300-683

ENVIRONMENTAL AND MECHANICAL CHARACTERISTICS

- IP66 or IP68 casing
- Convenient multi-surface mounting
- Operating Temperature: [-20°C; +70°C]
- Storage Temperature: [-40°C; +85°C]
- Dimensions (HxLxW): 12 x 4 x 3 cm
- Weight: 110 to 160 g

COMPATIBLE PRODUCTS

- GFlow, GTherm, GTank, GSense
- GTelemetry-powered mobile data terminals (Tablet PC, PDA, HHC)
- GTelemetry Compact Flash, GPort serial/USB cards, and GCard OEM wireless cards
- GCell GSM/GRF gateway
- GTalk repeater
- Data management and module configuration software

FUNCTIONAL FEATURES

- Data collection of 100 end points within 1min
- Programmable mode options for stand-by, scheduling and day/night
- Data record update with date/time stamp
- Programmable alarms for end points and GHub for tampering, battery level, backflow
- Records data and alarms with date/time stamp for mobile Reading
- Selectable operating modes: peer-to-peer, polling, repeater
- Wireless programming for network routing
- Up to three repeaters per route
- Resistant to RF interference
- Supports mobile and fixed network data monitoring schemes
- Flexible wireless network set-up with unlimited size
- 2-way links with mobile and fixed network control points
- Programmable via direct wireless or remote network connection
- Tree, star, and mesh network topologies
- Based on highly secure and reliable GT&T ULP communication protocol
- Battery: replaceable, life span up to 7 years based on reading once a week