G4N22GPS

Advanced, Miniaturized, Easy to integrate

Easy Installation & Maintenance:

- Wireless diagnose & setup
- 4 bi-colored LED status for GSM, GPS, CAN, Power
- Small size – easy to handle

Flexible to configure (examples):

- Advanced acquisition by speed, azimuth,distance, timers, GSM status
- Flexible I/O configuration (State & Event counters and generators)
- Event data logger, including mileage counters
- Advanced personnel identification (2000 tags / 6 groups)
- Customizable transmission by distance, GPRS traffic, timers, GSM status
- Geofencing with event management for 2000 classified areas
- External peripheral configuration (eg. GARMIN PNA)
- GSM security authentication by caller ID
- GPRS settings with fail-over APN and application server
- Power management & wake-up events and triggers

Specific system / events reported information (examples):

- Navigation info, dilution of precision, azimuth, trip distance
- System status, input power, battery voltage, up-time, GSM status
- Over 30 types of alerts triggered by system and peripherals
- I/O status, configuration, assigned counters and determined values
- CAN processed records / Driver behavior & analysis
- Personnel ID record – start, stop, distance, ID
- GARMIN message communication, waypoints & predefined routes

Project specific options:

- CAN-interface with FMS and brand dependent protocols
- LIN-interface with encrypted communication protocol
- External relay with associated controlled states
- Advanced personnell authentication with iButton tags
- Alert states triggered by subsystems
- External 2.4Ghz ISM antenna for downloading stored information

Key Features:

- 2.4 Ghz ISM short-range radio communication interface
- 2000 Geofencing areas
- 2000 Personnel ID tags
- CAN-interface & data analyzer
- LINbus encrypted protocol
- GSM traffic accounting
- EGNOS capable GPS
- Compressed TCP/IP data
- Advanced command system
- Easy software integration

Technical Parameters:

- Small size 80x40x20 mm
- Automotive grade processor
- Optimized RTOS for AVL
- GSM-GPRS Quad-band
- 65 channels GPS receiver with EGNOS support enabled
- 57.000 data records stored
- 2 configurable I/O with pull-up
- 2 configurable I/O low power
- 1 LIN-interface
- 1 CAN-interface (FMS, J1939)
- 1 Audio analogical interface
- 3-level watchdog
- 2.4 GHz ISM radio interface
- Temperature range -30~+85C
- Firmware upgrade over GPRS
- Humidity & corrosion protection

Power Supply:

- 8 – 40 VDc input range
- Li-Pol backup battery (12h)
- 1 pin for external battery

Optional Features:

- CAN-interface
- Temperature loggers
- GARMIN interface
- Dallas 1-Wire ID tags
- Thief Alert / Motion sensor
- IP65 housing

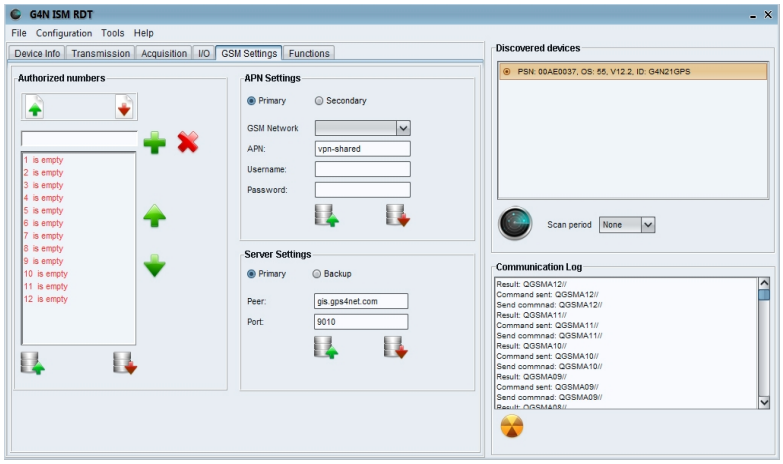
Tel: +33-9-72-12-58-60 , +40-364-71-11-60 E-mail: info@gps4net.com Web: www.gps4net.com

Secured maintenance & data access:

Since 2004 GPS4NET has developed a proprietary 2.4 GHz radio communication interface optimized for automotive. G4NISM interface is served by a classified radio protocol which guaranties the security of stored information in GPS devices as well as remote radio diagnose highly appreciated by field technicians.

G4NISM is performing network addressing, broadcasting and ping, supporting 65450 radio networks and 4096 addressable GPS units. Each business partner receives a confidential network address and a security key for unlocking the access to owned devices, thus avoiding any chance of device hijacking.

The setup and diagnose of every device produced by GPS4NET is possible over Remote Diagnose Tool (RDT), a PC based software that provides a firmware dependent interface for over 100 GPS devices discovered in radio range. This powerful tool gives full access to all features and settings over an USB secured connection.



AVL platform integration:

Integration of new hardware in existing AVL software platforms is always raising time-to-market and financial problems. For this reasons GPS4NET have created G4NReceiver, a middle-ware enterprise server application handling the TCP/IP communication with GPS units and SQL Database connection management.

G4NReceiver is UNIX compatible and designed to manage thousands of parallel open sockets. The communication with Database is managed internally from an XML descriptive file where complex queries are be configurable in a few minutes.

To complete the job, G4NReceiver is providing a full set of functions for real-time alarm processing, SMS processing, OTA auto-diagnose and a Web API for interfacing RDT. The combination between RDT and G4NReceiver is a state-of-the-art solution providing in the same time: GPRS communication management, wireless diagnose and offline setup of devices.

Advanced Concepts:

G4N21GPS is a flexible smart tracking device fully adaptable to various AVL applications and specific projects where time-to-market is critical.

For 7 years GPS4NET has designed over 6 different GPS tracking devices. This experience is reflected in a robust hardware platform where stability and security were the main goals.

The versatility of the platform is concentrated in a preemptive Real Time Operating System (RTOS) specially developed and optimized for tracking application. This proprietary RTOS has proved to be optimal on older GPS model and today is present in any products developed by GPS4NET.

Special Features :

- Following the market demand for a flexible and yet powerful authentication and personnel tracking solution, GPS4NET have implemented an engine based on iButton (Dallas) ID key technology, capable of handling over 2000 ID tags.

The Personnel Authentication Engine is designed to provide 6 groups of tags supporting actions for acquisition, transmission, alarm triggering, ignition control, or event generators. By providing such features, the engine is suitable for various business application from rent-a-car, personnel work-time calculation to utility control and maintenance.

- Due to the complex nature of the CANbus acquisition, GPS4NET provides ready made decoding profiles for J1939 & FMS networks implemented by most of the vehicle producers. This profiles are programmable over GPRS, being designed to offer a balance between the relevance of the information and the resources used (memory usage, GPRS traffic costs, server load).

The CAN acquisition engine have a built-in diagnostic and analyzer module which indicates visually (1 LED) or OTA the presence of CAN messages, helping the customization of profiles and easy installation.

- The Alarm Engine provides 23 real time event based alarms. Each alarm source is independently configured and dependent of the GSM Network status, thus providing a flexible monitoring of critical system or peripherals events.