

# G4N02FMS

Vehicle Data Interface  
CAN, Kline, Tachograph



ver.1.0

## KEY FEATURES

- Collect data from multiple CAN-bus and serial interfaces
- Compatible with utility vehicles
- Eco-driving – save fuel & CO2
- Unified data output
- Analyze engine regime
- Replace paper disk checking for analogical tachographs
- Tachograph real-time activities and remote download for the mandatory files
- Advanced command system
- Easy software integration
- Output in RS232 or CAN-bus
- Non-intrusive installation

### Product overview:

G4N02FMS - Vehicle Data Interface is designed to read data from a brand specific vehicle networks and translate it into standardized protocols like FMS / CANbus J1939 or RS232. The important data is selected and processed inside the interface by using customized profiles and algorithms that produce the specific information requested for Eco-driving analysis. The resulted information is helping companies to reduced operational costs and to turn their drivers in eco-drivers.

G4N02FMS has a dedicated connector used for linking to the digital tachographs and download the mandatory files, and also a dedicated input to read the real-time data necessary for estimating the current state of each driver and the remaining driving time.

G4N02FMS is an advanced FMS interface with connectivity to vehicle data networks such as: CAN-bus J1939 & ISO11992 , J1708/J1587, OBD, K-line, L-line, Analog and Digital Tachographs. The product is provided in several hardware versions adapted to certain vehicle types, brands and business activities.

### Vehicle network data processing:

- Read & analyze: engine regime, speed & cruise, brake analysis, fuel control, clutch & gear, error codes and vehicle status.
- Analyze trip, vehicle and driver performance for trucks, vans, lorries.
- Detects, analyzes and reports aggressive or dangerous driver behavior.
- Save fuel, induce safe driving and reduce CO2 emission.
- Uniform delivered data output for the entire fleet of vehicles.
- Selectable output interface: CANbus, RS232 or Bluetooth.
- Bluetooth interface can link with the driver through a smart phone showing him the current status of the truck, trailer or cargo.
- Non-intrusive installation when using the contactless bus reader G4N02TAP.

### Tachograph interfacing:

- Automatic remote tachograph download engine for drivers (d1v) and enterprise (c1v) files, mandatory for archiving and analysis.
- Valuable reporting on driving, resting time and working hours for drivers.
- Real-time alerting for potential over hours and non-compliance.
- Remote File Download over CAN-bus or serial port is compliant with the tachograph manufactured by VDO and Stoneridge.

### Technical Parameters:

- Platform3 RTOS for telematics
- RTC (Real Time Clock) hardware
- 4Mb Flash memory
- 8 configurable LED bi-colored
- 8 configurable pull-down I/O
- 1 Input Analogical / Digital
- 3D accelerometer sensor
- Firmware upgrade over GPRS
- Small size 80x40x20 mm
- Temperature range -30...+85C

### Communication Interfaces:

- 3x CAN-bus J1939 Interfaces
- 1x K/L-line Interface
- 3x RS232 Interfaces
- 1x RS485 J1708 Interface
- 1x J1850 Interface
- 1x USB slave serial port
- Bluetooth 4 - serial bus profile

### Power Supply:

- 6...36 Vdc input range
- 30 mA @ 24V nominal consume
- 5 Vdc output

### Available Options:

- Driver Awareness Panel
- Data logging on SD card
- Bluetooth 4 module
- Extended range ISM 868Mhz
- Serial Tachograph download
- Contactless CAN / J-bus reader

### PLATFORM3 FMS Concepts:

PLATFORM3 RTOS is the industry leading over-the-air device management & maintenance operating system, offering out-of-the-box, hands-free configuration and automatic post-installation upgrades, thus providing the ability to remotely monitor unit health status across customer's fleets to quickly identify issues before they become expensive problems.

GPS4NET is providing the most extended command stack on the market. With over 400 commands embedded in the RTOS the user is facing the full flexibility in selecting the output interface, the data output structure, events, information requests, the tachograph file download methods, the setup for FTP file transfer or any other configuration of the additional subsystems.

### AVL platform integration:

Integration of the new hardware in existing AVL or logistic software platforms is always raising time-to-market and financial problems. For this reason GPS4NET created G4NReceiver, a middleware enterprise server application for handling the TCP/IP communication with the telematic units and for providing live API data output.

The middleware allows the unattended remote download of driver and vehicle data, archive of current and historical vehicle details such as position information, mileage, vehicle status and speed, warnings of driver violations including overrunning driving time and speeding, driver budgets weekly/daily as well as for the current TCO status (working, driving, resting, availability).

### Designed for long-time-support:

G4N02FMS is designed to respond to future needs and functionality. The RTOS is continuously developed and improved to respond to the latest technological demands in terms of application and connectivity. Our modular approach means that our product can change with you. Build up the final product to suit your business needs with additional elements that can be added and removed at any time, with minimal disruption.

### Designed to bind with utility vehicles & machinery:

G4N02FMS is ready to connect every vehicle and to adapt to brand specific protocols with a singular firmware that can scale-up to customer demands for particular information. The firmware upgrade and vehicle profiling is performed over-the-air.

### Get a real inside of driving activities:

Using GPS4NET solution, vehicle fleets can save time and money on the transfer of signed mandatory files directly from the vehicle and archive information for a complete overview, including driving time, speed alerting and historical analysis. Transmission and display TCO data including current driving and resting time and remaining budgets for driver and co-driver.

