



Syrus **GPS** TRACKING DEVICE

SY2210

The **Syrus GPS** intelligent tracking and reporting device is the evolution platform of DCT's quad-band track, trace and locate in vehicle telematic products.

Designed for the most demanding fleet management operation, offering scalability, compatibility and added functionality to a simple cost effective track-n-trace operation.

With embedded high sensitivity GPS and GSM antennas and automotive Molex type connector the Syrus GPS is easy & quick to install.

Supporting simple & reliable communication protocols, it is compatible with any software platform.



Programmable Event-Action Engine / Flexible Customization: this easy to configure event engine, continuously monitors threshold status related to time, distance, turns, speed, motion, shock, acceleration, landmarks, timers, inputs, GPS and GPRS conditions and generates reports and actions to drive the GPRS communication or the store and forward log and to setup output status.



GPS and GSM Internal Antennas: high sensitivity built in internal antennas for quick installation, with connector for optional external GPS antenna for enhanced FIX precision.



Motion and Shock Detection / Driver Performance / Tow Detection: fully integrated 3-axis accelerometer for easy to configure motion and acceleration based events.



Multiple Input / Output Options with One-Wire Compatibility: offering 3 inputs, 1 ignition input, 1 ADC input, 1 one-wire input and 2 outputs, makes it ideal to control, manage and monitor fuel sensors, doors, panic buttons, vehicle immobilizer, siren, lights, driver identification with Dallas keys or any other compatible telematics application.



Internal Back-up Battery: allows for autonomous operation for up to 10 hours of full tracking and extended functionality depending on motion and power management setup, (low current consumption). Reverse polarity protection and thermal shutdown for enhanced battery life.



Automatic power saving mode based on the status of the ignition input and motion detector.



External Integration Capabilities: easy to integrate with the Garmin Fleet Management Protocol, serial satellite modems for back up communication, bar code scanners, mobile data terminals, fuel management sensors and/or other external data devices.



Remote Administration and Firmware Update: fully configurable over the network via GPRS and/or SMS. Also, operational firmware can be upgraded over the air (FOTA), as well as over the RS232 port.



Multiple Communications and Network Protocols: select from TCP/IP and/or UDP/IP and/or SMS/SMPP and reporting to up to 5 different control centers either IP and/or DNS with auto switching from GPRS to SMS and defining primary and alternative communications option. Alternate support between ASCII and/or Binary GPS protocol for efficient communication cost reduction management.



World Class Technical Support: a professional team of certified Field Application Engineers supporting the most demanding special reporting configurations will help our customers to design the ideal script.



Store and forward log: up to 7200 tracking events are stored in case of communication failure.



Digital Communications Technologies
5835 Blue Lagoon Drive # 202
Miami, Florida 33126 • USA
Tel: 305 455-4610 • Fax: 305 261-9224
sales@digitalcomtech.com

DCT
digitalcomtech.com

KEY FEATURES

- High sensitivity 66 channels GPS module.
- High sensitivity internal GPS antenna, with connector for optional external antenna.
- 4 band (850/1900, 900/1800 MHz) Cinterion GPRS module.
- Internal GSM multiband antenna.
- Intelligent configurable event engine, easy setup, reports up to 3 different actions per event.
- Turn by turn reports to guarantee the best possible tracking resolution.
- Internal back-up battery allows for autonomous full operation up to 10 hours and extended functionality with power saving mode.
- Motion detector, shock and aggressive driving detection
- Multiple I/O: 3 Inputs / 2 outputs / 1 Ignition / 1 ADC.
- Serial port RS232 (DB9) for easy integration with any external device like mobile data terminals, barcode scanners, satellite modems or RFID tag readers.
- One wire bus allows connection for additional serial ports, temperature and other analog sensors, ID readers, etc.
- Molex automotive type connector.
- TCP and/or UDP and/or SMS/SMPP communication protocols supporting up to 5 different IP or DNS destination servers and up to five SMS telephone Numbers.
- Binary and/or ASCII GPS protocols.
- Full audio/voice port for two-way communication.
- Store and forward: 7.200 events.

SPECIFICATIONS

POWER

- DC Voltage: 8V - 32 V

CURRENT CONSUMPTION:

- With Internal battery at null charge (IDLE): 380mA @ 12V. during 1,5 hours
- Long term average: 40 mA @ 12V.
- Reverse voltage polarity protection
- Thermal shutdown and current limit protection

INPUTS/IGNITION:

- 3 Auxiliary Inputs + 1 Ignition Input + 1 One-wire input
- Impedance: 50Kohms (Pull-Up)
- 1 Analog to Digital Input

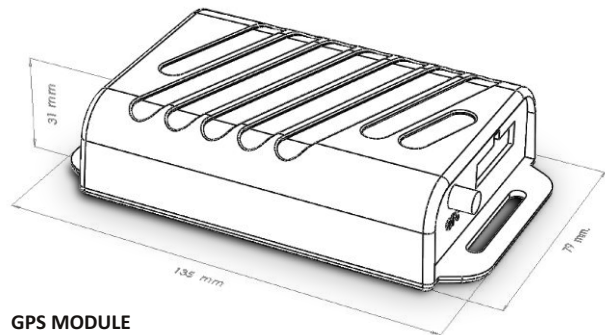
OUTPUTS

- 2 Outputs / Open Drain
- Continues current capacity: 2A
- Maximum instantaneous current (< 1 sec): 10A
- Maximum switching voltage: 30V

ENVIRONMENT

- Operating temperature: - 20 C to +60 C
- Storage temperature: - 30 C to +85 C
- Humidity: up to 95% non-condensing

DIMENSIONS



GPS MODULE

Parameter	Description
• GPS Solution	MTK MT3329
• Frequency	L1, 1575.42MHz
• Sensitivity	Acquisition -148dBm, cold start Reacquisition -160dBm Tracking -165dBm
• Channels	66
• TTF	Hot start : 1 second typical Warm start : 33 seconds typical Cold start : 35 seconds typical
• Altitude	Maximum 18,000m (60,000 feet)
• Velocity	Maximum 515m/s (1000 knots)
• Acceleration	Maximum 4G
• Update Rate	1Hz (default), maximum 10Hz
• DGPS	RTCM protocol / SBAS (default) [WAAS, EGNOS, MSAS,GAGAN
• AGPS	Support

GPRS MODULE

• Data transmission	GPRS Class 12 & Class 10 Max. 86 kbps (DL and UL) Coding schemes CS 1-4
• Voice	Triple-rate codec for HR, FR, andEFR Adaptive multi-rate AMR Hands-free operation, Echo cancellation & Noise reduction

PINOUT CONNMOLEX

