Piccolo Plus - The most innovative, most complete GPS unit for Fleet Management

Modular, easy to integrate and inexpensive to customize to your needs

Up to 6 Digital Temperature Sensors

I/O Input/Output

Garmin Interface

Driver ID Dallas keys or Passive RFID

Battery back-up

CANbus, OBDII/J1939 J1708

Piccolo Plus

WiFi

HOS/ Dispatch

RS232

Active RFID 2.4 GHz

Driver Behavior

RFLink

GPSLOGIK
VI SÄTTER DIG PÅ KARTAN

Piccolo Plus product specifications

All in one small package with gps and cellular antennas, optional external GPS and cellular antennas

Technical Specifications
- Network availability – 2G GSM/GPRS, 3G HSPA
- Frequency Bands - 2G Quad-Band European 3G 900/1800/2100, US 3G 850/1900 MHZ
- Enclosure – Flame retardant ABS/PC IP31
- Flame rating UL94V-0
- Optional water proof IP 65 enclosure with a blind cover without LED's.
- GPS Technology - MTK 66 channels
- Dimensions – 4" x 2.3" x 1.2" LWD (100mm x 58mm x 30mm) Additional 0.35" (9mm) on each side for mounting brackets
- Weight: 3.8 oz (110gr) without the cable

Environmental Specifications
- Operating Temperature: -40° to 176° F (-40° to 80° C)
- Storage Temperature: -40° to 221° F (-40° to 105° C)
- Humidity: 0 to 99% 110F (40C), non-condensing
- Shock/Vibration/Mechanical: meets or exceeds EIA standard RS-316B 3G (operating), 20G (non operating) XYZ 3 directions. Meets SAE J1455

Electrical Specifications
- Power source: 6VDC-32VDC tethered to vehicle battery or portable with cigarette plug connector
- ESD 4kV contact, 15kV air
- When external power is disconnected the unit automatically switches to back up 1800 mAh/3.7 VDC lithium rechargeable battery, when fully charged can send up to 1,200 GPS locations
- Protection: internal resettable, 1Amp fuse

Current Consumption
- Transmit mode: 200mA at 12VDC • Running mode: 70mA at 12VDC
- Hibernation mode: 20mA at 12VDC - (when waiting for external event with GPS on)
- Standby mode: 45µA - (switching to sleep mode automatically when engine is off and/or when external power is disconnected)

Base Features
- Digital Inputs - three contact events - two ground sense and one 8VDC – 32VDC positive sense • Analog Inputs – one 0-5VDC
- Digital Outputs – two open collector 500mA

Expansions
- Add three digital inputs for a total of four ground sense and two positive sense
- Add one analog input for a total of two
- Add RS-232 serial port for a total of two.The aditional RS-232 port can support RS-485.

Options
- Add communication with notebook or PDA via Wi-Fi
- Communication with notebook via USB
- Vibration sensor – sensitivity adjustable for automatic security alarm
- 3D Accelerometer – for tilt detection, detects and reports extreme driving behavior such as sudden acceleration,sudden lane crossing, sharp turns, and sudden braking
- Driver identification via iButton (Dallas key)
- Multiple temperature sensors
- Internal lithium 1800 mAh rechargeable battery
- Waterproof IP65 enclosure with a blind cover for trailer and asset tracking
- External SMA connectors for external cellular and/or GPS antennas FME Connector for GSM Antenna
- CAN bus:
o Implements ISO-11898 standard physical layers
o Suitable for 12V and 24V systems
o Operates at speeds of up to 1 Mb/s
o J1939 & FMS compatible
o ODB II
- J1708 interface
- Active RFID tags
- Garmin FMI interfaces
- Remote wireless IO's

Installation
- In cabin installation (usually under the dashboard when dashboard is plastic)
- External roof mount or trailer top with a blind waterproof cover

LED Indicators
- GPS: Off when service is disabled, blinking green when operating normally, blinking orange when GPS current reading is invalid, blinking red on GPS error
- Modem: Solid green when modem is registered, off when no signal is present or unit is off
- Data: Solid red when data is waiting to be transmitted, off when no data is in the buffer
- Power: Solid green when operating normally, off when unit is off, turning to orange when charging the internal battery

Functional Specifications (partial)
- Sends GPS location every XX seconds/minutes and/or every YY miles/km or any combination between time and distance based on speed
- Idle transmission – when the vehicle is idle (stopped) for a predetermined time period the unit can switch to transmit in idle mode, for example every 4 hours instead of every minute in move
- Event logs such as; engine on/off, vibration alarm, door open/close are sent with the time stamp of the event and can be configured remotely to be sent with or without the exact GPS location taken at the time of the event.
- Driver identification - Drivers' IDs that are authorized to drive the specific vehicle are downloaded to the unit OTA and only those drivers that have the matching Dallas key ID are authorized to start the vehicle and the driver ID is sent to the control center database
- Firmware download via USB or OTA
- Configurable via USB or OTA
- Highly compressed OTA, UDP communication packaged with MidLink Middleware and "Plug & Play" API or DLL for quick integration into any third party software
- Or direct TCP/IP communication OTA,(no Middleware) packaged with "Plug & Play" API or DLL for quick integration into any third party software
- OTA diagnostic tool
- Vibration sensor sensitivity OTA configurable
- Tilt detection and driver behavior violations sensitivity configurable OTA
- Store and forward – the unit can store up to 5000 events when out of cellular coverage then send them automatically when back in cellular coverage. Messages are stored on internal 8 Mb flash memory
- Geo-fence - auto alarm with GPS location when the unit moves in and out of a predetermined zone
- Tow detection – the unit is detecting when the vehicle is moving while the ignition is off
- Starter killer – when the vehicle is stolen a command is sent OTA to kill the starter so once the vehicle is stopped and the ignition is turned off it can't be turned on again (for safety reasons in most countries it's illegal to OTA turn off the engine or gradually decelerate when the vehicle is moving)
- Battery power value is sent automatically OTA to the control center database with every GPS data
- CAN Bus, J1939 and J1708 data like: Fuel consumption, oil pressure, distance travelled, RPM and much more can be sent to the control center in real time as the event occurs or with every GPS data or at a predetermined interval which is all OTA configurable
- Battery saving mode - switches to deep sleep mode when engine is turned off and automatically wakes up when switch is turned on or on vibration (this feature does not require back up battery)

GPSLOGIK
VI SÄTTER DIG PÅ KARTAN