

Locator-G3

GPS, GSM/GPRS, CAN Module for PC/104plus



The Locator-G3 is a high-performance PC/104plus card that offers all the essential functions for vehicle location, data acquisition and wireless/cellphone communication on a single PC/104plus module.



Offers all the
key telematic
functions
on a
single card

The Locator-G3 has a 20-channel GPS receiver for acquiring location information, a 4-band GSM radio for data and voice communications via Cellphone network and GPRS for a high-speed always-on wireless link. The Locator-3 also features two independent CAN Controller buses for attaching to the vehicle network.

The Locator-G3 is supported by a suite of drivers for Windows NT/2000/XP and Linux.

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The Locator-G3 is a versatile device and an ideal solution for telemetry, security, transportation, position tracking, fleet management and automotive applications.



Applications

Telemetry

Automotive

Vending Machines

Telematics Systems

Security Applications

Remote Data Acquisition

Fleet Management Systems

Traffic Monitoring and Control

Machine-to-machine (M2M) Applications

Remote Asset Tracking and Loss Prevention

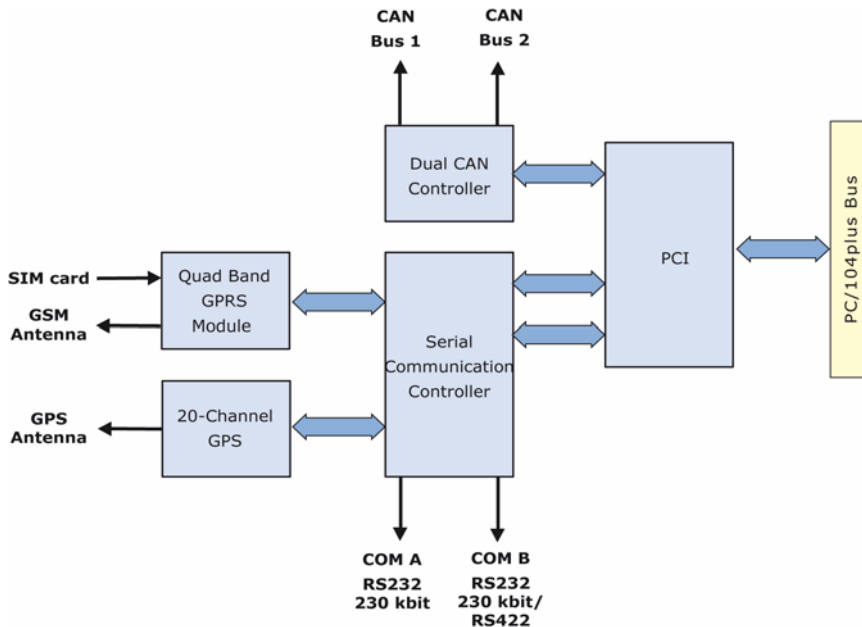
Comprehensive
software support
across major
operating systems

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Locator-G3 Block diagram

Features

- Single +5V power supply
- On-board SIM card socket
- Rugged, Low-power Operation
- Supports GPRS class-10 Modem
- 4-Band GSM supports SMS and Voice
- Drivers for Win NT/2000/SP-E and Linux
- Compact 3.6 x 3.8 in PC/104+ form factor
- Supports GSM850/900, DCS1800, PCS1900
- 20-Channel GPS for Location and Time data
- Two CAN bus for acquiring Vehicle Data (option)
- One RS232 port, one RS485 port at up to 10Mbit/s

Mobile
data and
voice
communications

PC104+ Bus Interface

Compliant with PCI Rev 2.1

GSM Features

Quad GSM Modes support
Hands-free Voice support
SMS Capability
Mobile Terminated Class 0-3, Mobile Originated Class 0-3
Supports 3V and 1.8V SIM cards

GSM Modes

E-GSM900, GSM850, DCS1800, PCS1900
E-GSM900 and GSM850 RF Power = 2W (max, into 50 Ohms)
DCS1800 and PCS1900 RF Power = 1W (max, into 50 Ohms)

GPRS

GPRS Class8, GPRS Class10
GPRS Data at up to 85.6KBits/sec
Data/Fax Transmission (Circuit-Switched data at up to 14.4KBits/sec)

GPS Receiver

20-Channel SiRF-Star3 Receiver
Data Format: NMEA 0183
Hot-start time of less than 2 seconds
Interface speed: up to 57.6KBits/sec
Real-time Clock and Alarm

CAN Bus Interface

Dual SJA1000 CAN 2.0B Bus Controllers (option)
Two independent full-duplex channels
Basic and Extended (Pelican) Mode support

Serial Ports

1 RS232 Port at up to 230KBits/sec
1 RS232/485 Port at up to 10MBits/sec (RS485)

System Requirements

x86 PC-Compatible PC/104+ host Computer
3.3V or 5V signalling PC/104+ bus

Power Consumption

Single +5V at less than 400mA normal operation
Voice: worst network conditions: 2A peak
GPRS: worst network conditions: 1A peak

Miscellaneous

Operating temp 0°C to 60°C
Extended Temperature -30°C to +80°C (option)
Standard 3.6 x 3.8in PC/104plus form factor
Antenna attachment: SMA or MMCX

Software

Drivers for Windows-NT/2000/XP, Linux
Sample GPS/GSM application in C/C++ source code
Other OS (QNX, Win-CE, VxWorks, etc) can be supported

Related Products

| | |
|-------------|------------------------------------------------|
| Micro886ULP | Ultra low power PC/104plus Computer (headless) |
| Tiny886ULP | Ultra low power PC/104plus Computer |
| MPEG4000XLP | 4-Channel MPEG4 Encoder/Decoder for PC/104plus |

Ordering Information

| | |
|-----------------|-------------------------------------------|
| Locator-G3-C2S2 | GSM/GPRS/GPS, 2 CAN Ports, 2 Serial Ports |
| Locator-G3-CoS2 | as above but without CAN Ports |
| LG3-Ant-GSM01 | GSM Antenna |
| LG3-Ant-GPS01 | GPS Antenna |



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