



Zebra Enterprise Solutions

# Infoman (INF-1001)

## Technical Specifications



DATASHEET

The Infoman is a flexible and powerful hardware device for location detection and electronic data capture (Telemetry) on high value fleet assets. Initially designed for the Aviation industry, the Infoman now delivers real-time control and monitoring of equipment and vehicles in a variety of industrial settings, from Airports and Military Air Depots, to Industrial Manufacturing, Logistics and Distribution centers.

The Infoman detects digital and analog signals from a variety of sensors on the equipment. GPS-based location and sensor data are submitted to the server using the available communication infrastructure to optimize costs and maximize availability. The Infoman communicates using either standard WiFi (802.11 b/g) or standard GPRS data communications via the public network. Additionally, the 24730 communication standard is supported to send information to a very sparse number of 24730 base stations.

A key feature of the Infoman is its configuration flexibility. The device can be configured to deliver raw data collected from the equipment. Alternatively, it can be configured as a state machine that is used to pre-process the signals with complex rules. This will add both intelligence and stability to the captured data before it is submitted, thus reducing data volume communicated to the server.

The Infoman serves as the communication hub for both capture of telemetry data as well as its transmission to the server. Besides vehicle location and telemetry data obtained from on-board analog and digital signals, the Infoman can also be connected to a range of additional sensors and devices, such as access control units and fuel or impact sensors for the ultimate in fleet monitoring and control.

As the Infoman was primarily designed for use in motorized fleet assets, it also supports CAN bus integration allowing you to directly obtain and transmit to the server any kind of data available on the vehicle's CAN bus.

### ● ● **INFOMAN: A STATE-OF-THE-ART TELEMETRY DEVICE PROVEN IN CHALLENGING INDUSTRIAL ENVIRONMENTS AROUND THE GLOBE:**

- Supports all modern means of communication
- GPS localization & tracking of motorized equipment
- Compatible with access control hardware for operator identification
- Equipment control & monitoring
- Geofencing capabilities
- Compatible with monitor for task-related driver communication including SCL (text) & VGA display
- Data storage
- Conditioning & fluid monitoring
- Speed monitoring & alerts

# Infoman Specifications

Hardware	
<b>CPU</b>	Intel XScale 520 MHz
<b>RAM</b>	64 MB
<b>Flash</b>	32 MB
<b>Clock</b>	RTC, buffered by battery
<b>Watchdog</b>	Hardware watchdog, triggered by application
<b>Status LED</b>	3 LEDs (Green = Application, Yellow = Communication, Red = Power)
<b>Power Supply</b>	9 - 30 volts DC, connection on the exterior part of the case, suitable for automotive engineering (12/24 volts, vehicles' main battery), reverse polarity proof
<b>Connector</b>	For digital and analog I/Os, CAN bus, OneWire Cable clamp procedure, Phoenix FK-MC 0.5 / 12-ST-2.5
<b>Case</b>	Solid aluminum case for installation into a switchboard, connectors on both front and back
<b>Dimensions</b>	156 x 49 x 124mm
<b>Volume</b>	Approx. 948 ml
<b>Weight</b>	858 grams

Peripherals: GPIO	
<b>16 Digital Inputs</b>	Opto-decoupled Ri = 3.5 - 4.3kOhm (depending on voltage) Input voltage range 0 - 35 volt LOW = 0 - 3.5 volts, HIGH = 3.8 - 35 volts 2 x 4 inputs sharing one ground pin 2 x 2 inputs sharing one ground pin 4 x 1 inputs with separate ground pin
<b>4 Digital Outputs</b>	Opto-decoupled, open collector Connection for LED or relay (working resistance up to 350 mA) One common ground Connection with Phoenix connectors
<b>2 Analog Inputs</b>	Opto-decoupled 0 - 10 volts with 12bit resolution Ri = 25 < 40kOhm fmax = 1kHz sine or square-wave Connection with Phoenix connectors
<b>2 Counters (Pwm)</b>	Opto-decoupled Ri = 3 - 6 kOhm Input voltage range 0 - 35 volts LOW = 0 - 3.5 volts, HIGH = 3.8 - 35 volts Connection with Phoenix connectors
<b>VGA</b>	Resolution VGA 640x480 or 800x600 (frequency 60/70Hz), external with D-SUB 15-pole
<b>CAN</b>	Compatible controller with 2.0a/b, connection with Phoenix connectors
<b>RS232</b>	2 external data links, D-SUB 9-pole, fully occupied; up to 115200 bps
<b>Ethernet</b>	10/100 MBit BaseT (RJ45), hot plug
<b>USB</b>	2 x USB Host V 1.1 (OHCI)

Communications and Positioning	
<b>GSM, GPRS-Modem</b>	Internal modem (Telit GC-864 GPRS), quad band (850/900/1800/1900) with external connector for antenna on the exterior side of the case with FME (male) connector. Other modems of the Telit 864 series on request basis.
<b>GPS-Receiver</b>	Internal module with uBlox LEA5 2,5 meters CEP and external connector for antenna on the exterior of the case with SMA (female) connector
<b>WiFi (optional)</b>	Compatible with IEEE 802.11 b/g with external connector for antenna on the exterior side of the case with SMA (male) connector
<b>Encryption</b>	WEP (64/128 bit) or WPA2

Physical Properties	
<b>Temperature Range</b>	Extended temperature range -20°C to +70°C
<b>Shock</b>	Composite Wheeled Vehicle (CWV) 40g 11ms per MIL-STD-810G, Meth 516.6, Proc I, Table 516.6-II
<b>Vibration</b>	CWV 2.24V/1.90L/1.48T Grms per MIL-STD-810G, Meth 514.6, Proc I, Category 4, Table 514.6C-VI
<b>Protection Class</b>	IP30
<b>Certificates</b>	CE, E1, FCC, IC, R&TTE
<b>Cooling</b>	Passive

Optional Peripherals: GPIO	
<b>GPIO Compact flash</b>	Automotive proof internal socket
<b>SD slot</b>	Automotive proof SD memory card
<b>SD memory card</b>	Up to 1 GB capacity (optional), no additional cards possible
<b>SIM card</b>	Accessible from the outside, automotive-capable SIM Slot Backup
<b>Battery Pack</b>	Optional external battery pack to remedy short power interruptions (engine start) and to allow for user defined shutdown procedures in case of long-term power loss.
<b>User Identification (Access Control)</b>	By iButton Key, connection with Phoenix connectors

Software	
<b>Operating System</b>	Embedded Linux
<b>Drivers, Service, Tools</b>	TCP/IP-Stack WiFi 802.11b/g PPP and chat for GPRS communication connection Console login Http-server with cgi-support SSH client und daemon VPN (IPSec) and/or OpenVPN (ssl) Serial interface program (minicom) Editor (nano) Touch driver (device) incl. calibration VGA as frame buffer device

Power Supply	
<b>Power Supply</b>	Continuous power supply from the main battery (12 volts / 24 volts)

