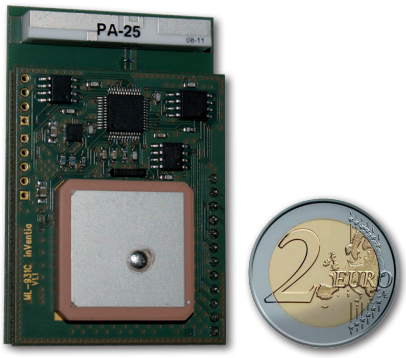
Energy saving localization module GPS/GPRS ML-931

- Specialized module for localization and monitoring of wild and free going animals
- Integral, 50 channels GPS receiver with highest sensitivity (-162 dBm) SuperSense® technology
- Integral, quad-band GSM modem
- 1 binary/supply* output
- Large 30k records data logger
- RS232serial port (TTL)*
- 3 axis accelerometer

** optional*



Energy saving localization module ML-931 is a specialized telemetry module dedicated to monitor wild animals and other mobile objects.
Module's design is based on latest GPS/GSM technologies securing precise localization and reliable operation in changing GSM propagation conditions.
The module is manufactured as OEM without dedicated housing.

Resources

- 1 binary/supply output
- Main supply input with voltage monitoring
- Real Time Clock
- 30k records logger with option of expanding to 60k

Functionality

- Cyclical location computing based on received GPS signals
- Detection of missing GPS signal
- Reporting according to defined criteria of time, motion, activity
- Logging of information when GSM communication is not available
- Transmission modes
  - GPRS – packet transmission
  - SMS
- Transmitting information according to time schedule
- Configurable home and roaming transmission parameters
- Dynamic SMS compilation allowing sending current measurement data
- Adjustable SMS transmission limit
- Remote configuration via GPRS/SMS - the module is preconfigured by manufacturer
- Configurable access security list for IP addresses and phone numbers
- Monitoring of power supply voltage
- Monitoring of internal parameters state
- 3-axis accelerometer
  - motion detection
  - activity detection
- Optional silicone rubber molding to achieve IP65 ingress protection
- Reed-switch activated storage mode
- LED module's status indicator
- RS232 serial port for communication with extension modules*

** optional*

WARRANTY 3 YEARS option

energy efficient

SMS

GPS

RS-485 option

ML-931

General

Dimensions (length x width x height)	62 x 40 x 16 mm
Weight	40 g
Gross weight (with silicone)	100 g
Mounting method (proprietary)	user defined
Operating temperature	-20 to +55 °C
Protection class	none (IP65 optional)

GSM/GPRS Modem

Modem type	μblox LEON G100
GSM	GSM Quad Band (850/900/1800/1900)
GPRS class	10
Antenna	built in antenna

GPS receiver

Receiver type	μblox NEO-7
Sensitivity	-162 dBm Super Sense® Indoor GPS
Channel number	50
Antenna	built in passive antenna

Power supply

DC voltage	2 – 5 V
Current in active state (mA)	50 mA (average) 400 mA (max.)
Current in sleep state (μA)	< 50 μA (activity control off) < 200 μA (activity control on)

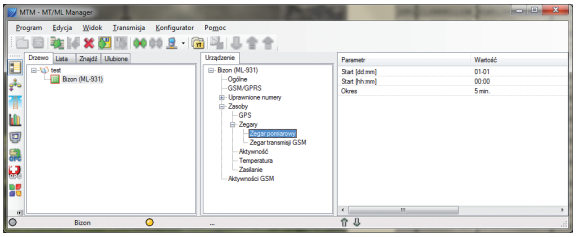
Serial ports

Standard	RS-TTL (2,7 V)
Application	external sensors

Binary output/power supply

Maximum current	50 mA
Logic level "0"	0,0 – 0,3 V
Logic level "1"	3,5 – 3,8 V
Application	external power supply (VHF)

Configuration application



Supplementary information:

INVENTIA Sp. z o.o.
ul. Kulczyńskiego 14, 02-777 Warszawa, POLAND
tel.: +48 22 545-32-00, 545-32-01
fax: +48 22 643-14-21
inventia@inventia.pl, www.inventia.pl

INVENTIA complies with ISO 9001:2008 certified Quality Management System!
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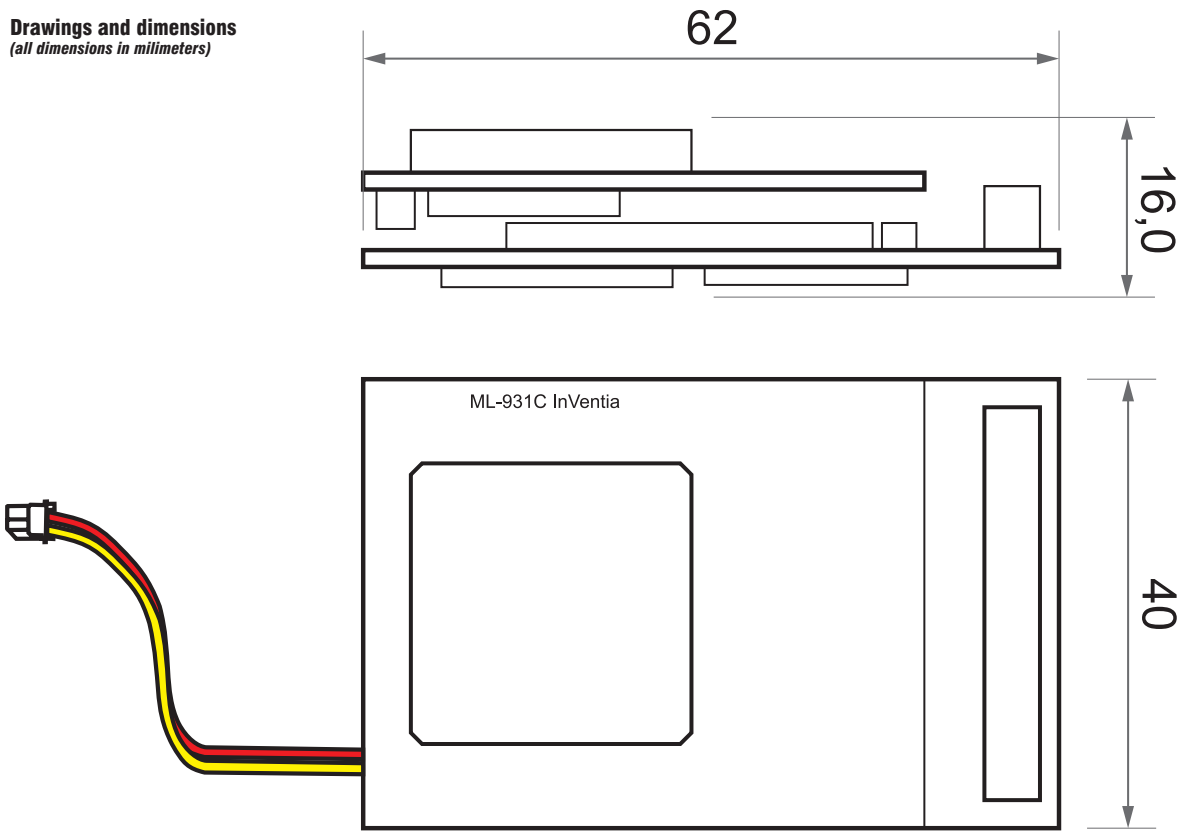
from the European Regional Development Fund resources.

Drawings and dimensions

(all dimensions in milimeters)



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