

erco & gener

L'esprit modem >>



Entirely dedicated to the geo-localisation and embedded information services, the GenLoc 31e modem combines GSM/GPRS and GPS functions in a single robust case.

The GPS information may be transmitted by either SMS or GSM/GPRS data communication.

The same product manages the 16 channel GPS function. The high sensitivity GPS solution ensures the reception of GPS data in difficult environmental conditions.

The modem is bi-band (900/1800 MHz or 850/1900MHz) and GSM/GPRS Class 10.

The GenLoc 31e provides optional connectivity IP protocols (TCP, UDP, FTP, SMTP, POP3).

Also, the Open-AT development tool allows supplementary onboard personalised applications.

The GenLoc 31e provides digital input/outputs allowing the development of onboard value-added telematic solutions.

GenLoc 31e

- GPS LOCALISATION
- GSM / GPRS COMMUNICATION

TECHNICAL CHARACTERISTICS

GenLoc 31e

GSM / GPRS FEATURES

- E-GSM 900/1800 MHz (or optional 850/1900MHz)
- ETSI GSM Phase 2+
- Class 4 (2W @ 900 MHz)
- Class 1 (1W @ 1800 MHz)
- SIM Toolkit Release 99

VOICE FEATURES

- Voice (GSM mode)
- Telephony, Emergency Numbers 112
- Full Rate, Enhanced Full Rate, Half Rate (FR/EFR/HF)
- Echo cancellation and noise reduction
- Full Duplex Hands Free

DATA FEATURES

- GPRS Class 10 (Up to 4Rx / 2Tx)
- Supports PBCCH, coding schemes: CS1 to CS4
- Asynchronous data circuit, transparent and non-transparent up to 14400 bits/s
- SMS point to point MT/MO and SMS CB

GPS FEATURES

- 16 channel μ blox receiver
- Precision:
 - 2,5 metres CEP
 - GPS 2m CEP
 - A-GPS Compatible
- Acquisition time:
 - Hot start: < 3,5 sec
 - Cold start: 36 sec
- Re-acquisition time after loss of signal < 1 s
- High sensitivity: -158 dBm when Tracking
- Protocols:
 - NMEA-0183 Input/output
 - UBX binary input/output
 - RTCM in
- Integrated supply for active 3V GPS antenna
- Antenna fault detection (absence or short-circuit)

INTERFACES

- Antenna, 2 separate connectors:
 - GSM: SMA-F
 - GPS: SMB-M
- Power supply: 5.5Vdc to 32Vdc (micro-FIT connector)
- RS232 + Audio via a female 15-pin Sub-D
- AT commands: GSM 07.05 and 07.07

- Specific GenLoc 31e AT commands:
 - Multiplexage DSR / position (NMEA)
 - Multiplexage DTR / position (NMEA)
- 3 opto-coupled inputs, 3Vdc to 32Vdc (micro-FIT connector)
- 1 open-collector output 60Vdc - 1A (micro-FIT connector)
- SIM card reader (SIM 3V - 1,8V)
- Buzzer output
- Watchdog
- Power and I/O cables included

AVERAGE POWER CONSUMPTION

- GSM 900 MHz: 105 mA @ 12 V in communication
- GSM 1800 MHz: 80 mA @ 12 V in communication
- Idle mode: 5 mA @ 12 V (GPS off)
- GPS: 38 mA @ 12 V

ENVIRONMENTAL & MECHANICAL

- Operating temperature: - 20°C to + 55°C
- Storage temperature: - 30°C to + 85°C
- IP31 aluminium case:
 - Length 73 mm x Width 54 mm x Depth 25 mm
- Weight: 95g

APPROVALS

- R&TTE (Radio & Telecom. Terminal Equipment)
- Automotive approval: E24 10R-020250 ("E" label)

OPTIONS

- Flash memory extension
- Shock detector
- 850/1900MHz
- TCP / IP Library (PPP RFC, TCP Socket, UDP Socket, SMTP, POP3, FTP)
- Approved magnetic μ blox GPS antenna (SMB-F) (ref.: 60302B1501)
- GSM antenna (SMA-M)
- Serial Data cable - 15M/9F or Data/Audio cable - 15M/9F/RJ9
- 230 Vac - 12 Vdc power supply
- GenBlue 10e:
 - remote-supply Bluetooth® / RS232 adapter

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