



LOCALIX Series



120

100

200

LAND DEFENCE INERTIAL NAVIGATION AND POINTING SYSTEMS



Inertial navigation and positioning for:

Land vehicles

Unmanned surface vehicles

On-board gun stabilization

Performance

- High accuracy
- Extreme shock endurance
- Low settling time
- Superior reliability
- Calibration free

Based on fiber optic technology, specially designed and produced for any type of land vehicle requesting high precision and reliability in attitude, position and speed calculation.

AHRS

| | |
|-----------------------|---|
| Heading accuracy | 8 mils RMS |
| | 5 mils RMS |
| | 1 mils RMS |
| Roll / Pitch Accuracy | < 2 mils RMS |
| | < 2 mils RMS |
| | < 0.35 mils RMS |
| Range | Heading 0° ÷ 360° Roll/Pitch ± 90° |
| Alignment time | < 10 min (full accuracy) < 30 sec (fast alignment stored values) < 5 sec (start-up time) |
| Available input | VMS, GPS, On Board control and management Calculator |
| Data Outputs | Attitude (Roll, Pitch, CANT) Heading (Gyro compassing) Speed, Position, System Status Information, BITE information, distance travelled. |

POSITION ACCURACY

| | |
|---------------------|--------------------------------|
| Horizontal position | < 10 m CEP (GPS P(Y)) |
| | 0.5% DT CEP (no aiding) |
| | 0.3% DT CEP (VMS only) |
| | 0.4% DT CEP (no aiding) |
| | 0.2% DT CEP (VMS only) |
| | 0.1% DT CEP (VMS only) |
| Vertical position | < 10 m EP (GPS P(Y)) |
| | 0.4% DT EP (no aiding) |
| | 0.3% DT EP (VMS only) |
| | 0.3% DT EP (no aiding) |
| | 0.2% DT EP (VMS only) |
| | 0.1% DT EP (VMS only) |

DT: Distance Travelled

VMS: Vehicle Measurement Sensor

INTERFACES

| | |
|--|--|
| Output serial | 6 serial lines up to 100 Hz (200 Hz optional) |
| Input serial | 2 serial lines up to 100 Hz (200 Hz optional) |
| Ethernet LAN | N. 1 available |
| I/O serial Display | 1 |
| I/O type | RS232, RS422, Ethernet, CANBUS, MIL-PRF 71196, Customer Interfaces: GPS - VMS - On-Board Calculator |
| I/O Protocols | NMEA 0183, MIL-PRF 71196, Customer protocols: GPS - VMS - On-Board Calculator |
| Input pps or pulse log | N. 2 available |
| RF Input for internal GPS/Galileo receiver | N. 1 available |

ENVIRONMENTAL FEATURES

| | |
|------------------------------|-------------------------------------|
| Operating temperature | - 32° C ÷ 55° C |
| Storage temperature | - 40° C ÷ 80° C |
| Power Supply | MIL-STD-1275 rev. B |
| Sand and dust | MIL-STD-810F (meth. 510.4) |
| Immersion, fording, rain | MIL-STD-810F (meth. 512.4, II) |
| Damp | 95% |
| Salt Fog | MIL-STD-810F (meth. 509.4) |
| Vibrations | MIL-STD-810F (meth. 514.5, cat. 20) |
| Shock | MIL-STD-810F (meth. 516.5, I) |
| Electromagnetic interference | MIL-STD-461 E |
| MTBF | > 80,000 hours |

POWER SUPPLY

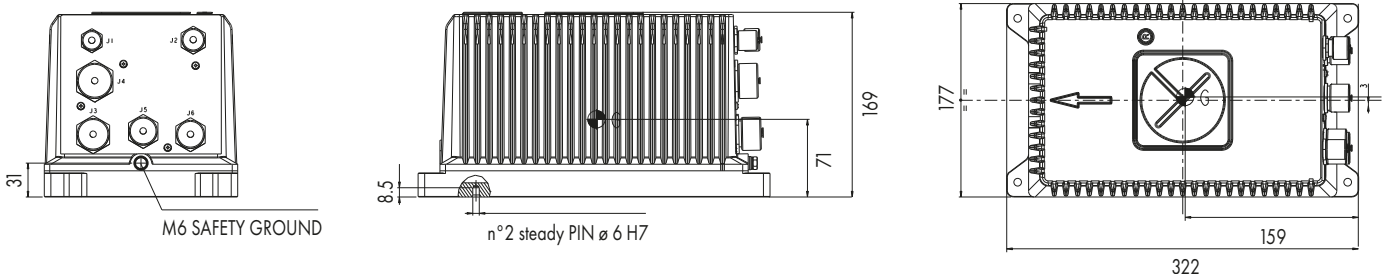
| | |
|------------------|---|
| Voltage | 24 Vdc (16 Vdc ÷ 32 Vdc) |
| Power absorption | < 15 W |
| Protection | Against over-voltage, low voltage and inversion of polarity |

OPERATIONAL MODES

| | |
|----------------|---|
| Inertial / VMS | Full inertial mode with or without VMS aiding |
| ZUPT | Zero velocity update status |
| GPS / VMS | GPS aiding with or without VMS aiding |
| GPS + ZUPT | GPS aiding with zero velocity update |

NO ITAR Components

dimensions in mm.



Weight: 8 Kg.

Surveillance & Security **Guidance, Navigation & Positioning** **Military & Defence** **Marine Electronics**

This brochure should not be considered a contractual offer. The specifications given herein may be changed by the manufacturer, GEM elettronica S.r.l., without notice.

