



MGS500 3G HSPA

Key Features

- HSPA 3G wireless communication
- Full support for Garmin FMI
- Multiple inputs and outputs
- Internal 3-Axis Accelerometer
- Over-the-air configuration & firmware management
- 1-Wire Support for Driver ID & Temperature Sensors (x4)
- NMEA GPS output

Physical Specifications

- Dimensions 5.5 x 5 x 1 inches
140 x 127 x 25mm
- Weight 12 ounces/34 grams
- GPS antenna conn. SMA
- Cellular antenna conn. SMC
- Power Connector 4-pin 3mm Molex
- Data Connector 22-pin 3mm Molex
- Auxiliary conn. 18-pin 3mm Molex
- Serial II conn. 12-pin 3mm Molex
- Ethernet conn. RJ-45

Environmental Specifications

- Operating Voltage 8v - 30v
- Functional -4° to 140° F / -20°C to 60°C
- Storage -4° to 158° F / -40°C to 85°C
- Humidity 5 to 95% non-condensing
- Shock and Vibration SAE J1455
- ECM/EMI SAE J1113

Communication

- Air interfaces HSPA, HSPDA, EDGE, GPRS and GSM
- Frequency UMTS/HSDPA/HSUPA 800/850/1900/2100 MHz
- Bands EDGE/GPRS/GSM 850/900/1800/1900 MHz
- Peak theoretical download speeds of up to 14.1 mbps

Communication Protocols

- SMS (MO/MT), UDP/IP Sockets, TFTP, TCP/IP Sockets
- FTP, SMTP (email), Telnet and DHCP (client or server)

Optional Features

- Integrated motion sensor
- Backup battery
- Mobile Data Terminal support
- Wi-Fi Bridge/AP support
- GPS and cellular antennas
- Serial cable
- I/O cable
- Garmin PND power/comm. cable

Electrical Specifications

- Operating Voltage 8 tp 30v DC
- Power Consumption
 - Operating <150mA @ 12V DC)
 - Standby 17mA @ 12V DC
 - Sleep <2mA @ 12V DC

Inputs/Outputs

- Digital Outputs 13 (7 hi, 6 low)
- Analog Input 1
- Relay Drive Outputs 4
- Serial Ports 3
- Ethernet Port 1 (10/100 MDI-X)
- Switched 12v output 2 (1.2A max. each)
- LED drive Output 1
- 1-Wire Port Dallas iButton and Temp Sensors
- Status LED's GPS and Cellular

GPS Technology

- GPS Receiver 50 Channel L1 C/A code, WAAS/SBASS
- Sensitivity -160dBm
-143dBm Cold Start (un-aided)
- Horizontal accuracy 2.5m, 2.0m, SBAS (CEP 50%)
- Time-to-first-fix 32s (@-130dBm, Cold start)

Approvals

- Regulatory FCC, PTCRB
- Carrier AT&T, TELUS