



SIGMA-3N

GPS L1/L2/L2C/L5, GALILEO E1/E5A/E5B/AlBoc
GLONASS L1/L2/L3, BeiDou B1/B2



SIGMA is a powerful receiver for high accuracy applications, such as reference stations and CORS. 864 GNSS channels of SIGMA-3N allow tracking all current and future satellite signals.

The SIGMA receiver includes TriPad (two LEDs, ON/OFF and function button), GSM/CDMA2000 module, UHF/VHF modem, Bluetooth, Ethernet capability, up to two serial ports, up to two event markers and 1PPS timing strobes, and rechargeable batteries.

Two external power inputs secure the power system redundancy and eliminate system failure.

The CAN interface in SIGMA receiver is provided complete with all associated hardware and firmware, not just the CAN bus. The same is true with all the serial RS232/RS422 ports in our receiver.

In addition to timing strobe and event marker, the SIGMA receiver includes the option of complete IRIG timing system.

SIGMA-3N

Tracking Features

- Total 864 channels: all-in-view
- GPS C/A, P1, P2, L2C (L+M), L5 (I+Q)
- Galileo E1 (B+C), E5A (I+Q), E5B (I+Q), AltBoc
- GLONASS C/A, L2C, P1, P2, L3 (I+Q)
- QZSS C/A, L1C(I+Q), L2C (L+M), L5 (I+Q), SAIF
- BeiDou B1, B2
- SBAS L1, L5
- In-Band Interference Rejection
- Advanced Multipath Reduction
- Fast acquisition channels
- High accuracy velocity measurement
- Almost unlimited altitude and velocity(for authorized users)

Data Features

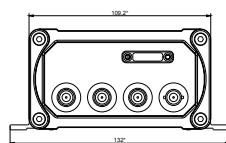
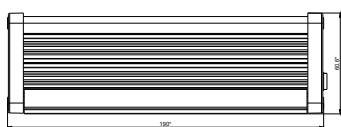
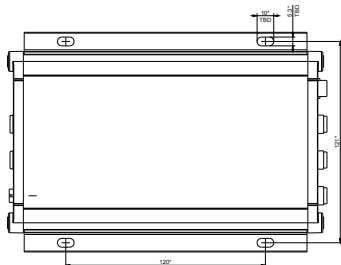
- Up to 100 Hz update rate for real time position and raw data (code and carrier)
- 10 cm code phase and 1 mm carrier phase precision
- IEEE 1588 protocol support
- Hardware Viterbi decoder
- RTCM SC104 versions 2.x and 3.x Input/Output
- NMEA 0183 versions 2.x and 3.0 Output
- Code Differential Rover
- Code Differential Base
- Geoid and Magnetic Variation models
- RAIM
- Different DATUMs support
- Output of grid coordinates

Data Storage

- Up to 16 GB of onboard non-removable memory for data storage

Radio Specification

- Internal GSM/GPRS/EDGE quad-band module, GPRS/EDGE Class 10
- Internal CDMA2000 dual band module 800/1900MHz
- Internal 360-470 MHz radio transceiver, up to 38.4 kbps



- Internal 138-174 MHz radio transceiver, up to 38.4 kbps
- 1 Watt

Input/Output

- Two External Power ports
- Two high speed RS232 serial ports (up to 460.8 Kbps)
- Two high speed configurable RS232/RS422 serial ports (up to 460.8 Kbps)
- High speed USB 2.0 device port (480 Mbps)
- Full-duplex 10BASE-T/100BASE-TX Ethernet port
- Two CAN 2.0 A/B ports
- IRIG timecode output A134, A137, B124, B137
- Two 1 PPS outputs synchronized to GPS, GLONASS or UTC
- Two Event Marker inputs
- External Reference Frequency Input/Output
- TriPad interface: Four external LED drivers, ON/OFF control and External Command inputs

Power Specification

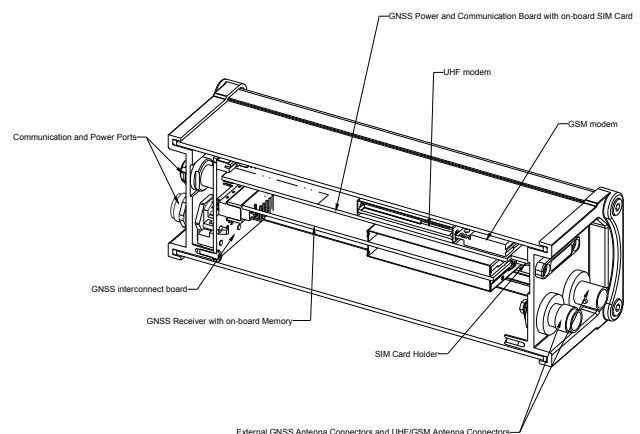
- Two internal Li-Ion batteries (7.4 V, 4.4 Ah each) with internal charger
- Power consumption: 3.8 Watt
- Operating Time up to 15 hours
- Two External power inputs: 1 - primary, 1 - secondary port(s)

Environmental

- Operating Temperature: -30°C to +55°C
- Storage Temperature: -20°C to +45°C
- High shock and vibration resistance

Physical

- Dimensions: 5.2 x 2.4 x 3.54 inches (132x61x 90 mm)
- Weight: 2.8 lbs (1.27 kg)



Specifications are subject to change without notice



JAVAD GNSS
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