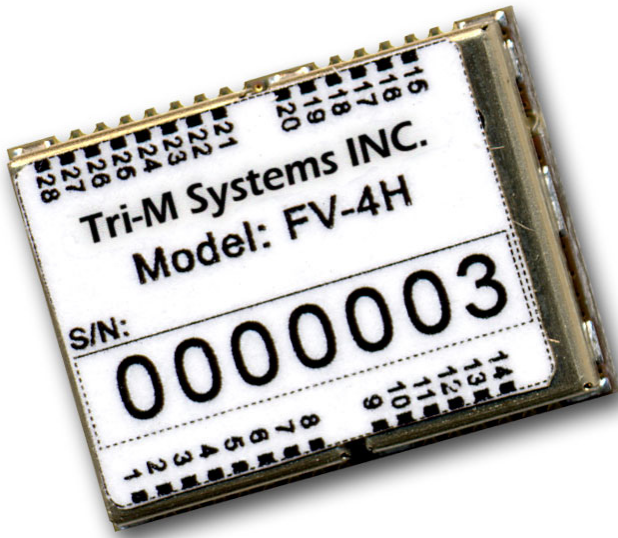


FV-4H

GPS Engine Board (GPS Module)



features

- 38mA supply current at $V_{cc} = 2.7\text{ V}$ (Power reduction by more than 35% compared to predecessor modules)
- USB connectivity
- Significantly lower battery backup current
- Configurable I/O and UART voltage levels
- RoHS compliant (lead-free)
- SuperSense Indoor GPS
- 16 channel ANTARIS 4 positioning engine
- 4 Hz position update rate
- Assisted GPS (MS-Assisted, MS-Based)
- DGPS and full SBAS (WAAS, EGNOS) support
- FixNOW power saving mode
- Supports passive and active antennas
- Antenna short and open circuit detection and protection
- Operating temperature range: -40 to 85°C

specifications

Receiver Type

- LI Frequency, CA Code
- 16-channels
- 8192 time/frequency search window

Max Navigation Update Rate

- 4Hz

Accuracy

- Position: 2.5m CEP 5.0 SEP
- Position DGPS/SBAS: 2.0m CEP 3.0 SEP

Acquisition

- Cold Start: Fast Acquisition Mode=34s, Normal Mode=36s, High Sensitivity Mode=41s
- Warm Start: 33s
- Hot Start: <3.5s
- Aided Start: 5.0s
- Reacquisition: <1.0s

Sensitivity

- Tracking: -158 dbm
- Acquisition & Reacquisition: -148 dbm *includes aided started (A-GPS)
- Cold Start: -142 dbm

Accuracy of Timepulse Signal and 2-channel / TimeMark / Counter

- RMS: 50ns
- 99%: <100ns
- Granularity: 43ns

Dynamics

- Strong Signals: < or equal to 4g
- Weak Signals: 1g typical

Raw Tracking Data (Optional)

- Contents: Carrier and Code Phase, Doppler Measurements
- Max. Update Rate: 10Hz

Operational Limit (COCOM)

- Altitude: 18,000mg
- Velocity: 515 m/s
- * One of the limits may be exceeded but not both.

Ordering Information

Part Number

FV-4H

Description

GPS Engine Board (GPS Module)

this product is
manufactured by:

TRI-M
SYSTEMS

Tel: 604.945.9565 ~ Fax: 604.945.9566 ~ www.tri-m.com
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TRI-M
SYSTEMS