

RXM-GNSS-TM

Changing to the RXM-GNSS-TM GPS Module



Description of Change

The Fastrax iTrax03 GPS module has been discontinued and was replaced on RTD boards with a Linx Technologies RXM-GNSS-TM GPS.

Products Affected

- GPS16160 was replaced by GPS16162
- COM16055 was replaced by COM16155
- COM16055R was replaced by COM16155R

GSM Compatibility

Modules with GSM will use the same GSM modules so this is unchanged.

GPS Compatibility

Linx Technologies RXM-GNSS-TM GPS

The Fastrax iTrax03 GPS module has been replaced with a Linx Technologies RXM-GNSS-TM. Application software that just reads NMEA messages will see little difference. However, there are new commands and new messages to support the additional features that were not supported by the Fastrax module. Here is a quick spec list for the RXM-GNSS-TM:

- In addition to the United States' GPS system, the RXM-GNSS-TM supports Russia's GLONASS, Europe's GALILEO, and Japan's QZSS GPS systems
- Channels: 99
- Frequency: 1575.42 MHz
- DGPS support: SBAS, RTCM, WAAS, EGNOS, MSAS, and GAGAN
- RX sensitivity Tracking: -164 dBm typical
- Cold start: -147 dBm typical
- Acquisition Time Hot Start (Open Sky): <1 second typical
- Cold Start (AGPS): <15 second typical
- Antenna Input impedance 50Ω
- Position Accuracy 2.5m
- 1PPS output
- Protocol NMEA 0183 ver 4.10

Unsupported Features

The new modules no longer support these features:

- Fastrax's proprietary iTalk binary protocol
- GPS fix status signal in I/O connector (GPS16160 only) and GPS fix status LED
- NMEA commands specific to the Fastrax module

Antenna Bias

The RXM-GNSS-TM GPS has a fixed 3.3V antenna bias, therefore the fuse and GPS antenna bias jumper has been removed.

