

mmTR[®]-S Plus High performance, embedded multi-GNSS receiver

FEATURES

GNSS signal tracking

544 hardware channels for simultaneous tracking of all visible supported satellite signals:

- GPS : L1C/A, L1C, L1PY, L2C, L2P, L5
- GLONASS : L1CA, L2CA, L2P, L3 CDMA
- Beidou : B1I, B1C, B2a, B2I, B3
- Galileo : E1, E5a, E5b, E5 AltBoc, E6
- QZSS : L1C/A, L1C, L2C, L5, L6
- Navic : L5
- SBAS : Egnos, WAAS, GAGAN, MSAS, SDCM (L1, L5)
- On module L-band

NavSys's proprietary technologies

- **On-board, embedded modules :**
 - Multi-band, multi-constellation GNSS chipset
 - UPS (Uninterruptable Power Supply) for DC power, solar cell and battery
 - Network switching hub for GNSS data communication
 - Watch dog for auto/remote system reset
- **Related Patents :** 10-2458817 (Korea)

mmTR[®]-S Plus is a high-performance, embedded multi-GNSS receiver which is especially designed for mm-level high-precision applications, and is a basic component of NavSys's other products.



mmTR[®]-S Plus

PERFORMANCE

RTK performance

- Horizontal accuracy 6 mm + 0.5 ppm
- Vertical accuracy 10 mm + 1 ppm
- Initialization time ≤ 7 s

Other positioning performance

	Horizontal	Vertical
• Standalone	1.2 m	1.9 m
• DGNSS	0.4 m	0.7 m
• PPP	0.04 m	0.06 m

GNSS output

- Position ≤ 100 Hz
- Measurements ≤ 100 Hz

Time to first fix

- Cold start < 45 s
- Warm start < 20 s
- Re-acquisition 1 s

C/N0 threshold

- Tracking 20 dB-Hz
- Acquisition 33 dB-Hz

PHYSICAL & ENVIRONMENTAL

Electrical

- Input voltage 12.0 V
- Power consumption 36 W max

Environmental

- Operating temp -40 to 85 °C
- Storage temp -55 to 85 °C
- Humidity 5-95% (non-condensing)
- Vibration MIL-STD-810G
- Certification KC, CE, RoHS, WEEE
- Registration No. R-R-Nmm-mmTR-SPlus

Receiver

- Size 156(W) × 80(H) × 240(L)mm
- Weight 1,450 g
- Back-up memory size 64 GB