

Shaper NM

Anti-Spoofing & Anti-Jamming GNSS receiver for UxS platforms

By utilizing NovAtel/Hexagon's special military-grade defense firmware, featuring exceptional anti-spoofing and anti-jamming performance and backed by a proven track record in heavily contested domains, the SHAPER-NM ensures reliable and accurate navigation in GNSS-denied and spoofing-rich environments

Key features:

- Specialized military Defense firmware from NovAtel / Hexagon.
- Optimized for use with CRPA antennas from multiple manufacturers
- Built-in barometer for additional height reference in spoofing environments
- Fully compatible with most UxS autopilots on the global market
- A wide option of data input/output interface
- Auxiliary UART port with enhanced filtering functionality, providing an additional layer of data validation and integrity
- Built-in SMART controller for receiver operations enhancement, as well as optional raw data logging for further analysis
- User Friendly WEB interface for system configuration and GNSS receiver's performance monitoring and interference evaluation
- Available in enclosure and as OEM versions



GNSS Performance

Frequency (Tracking & Position):

555 hardware channels for simultaneous tracking of

- **GPS:** L1 C/A, L1C, L2C, L2P, L5
- **GLONASS:** L1 C/A, L2 C/A, L2P, L3, L5
- **Galileo:** E1, E5 AltBOC, E5a, E5b, E6
- **BeiDou:** B1I, B1C, B2I, B2a, B2b, B3I
- **QZSS:** L1 C/A, L1C, L1S, L2C, L5, L6

GNSS Accuracy (RMS)

Single point position:

- Single point 1.2 m
- SBAS 60 cm
- DGPS 40 cm
- TerraStar-C PRO 2 cm

Key tracking performance in noisy environment

C/N0 thresholding value:

- Signals tracking and retention less 24 dB-Hz
- Signals acquisition 33 dB-Hz

Interfaces:

- Wi-Fi: built-in WEB UI for pre-launch preparation and inspection, including an Interference Tools Kit
- 1 UART (LVTTTL)
- 1 Filtered UART (LVTTTL)
- 1 COM port (RS-232)
- 1 USB device (2.0, HS)
- 2 Event markers input (connection of two cameras)
- Built-in SD card memory (up to 64 GB) for raw data recording

Connectors Type:

- PA FAMILY Connectors for main interfaces and power
- Type C for USB
- SMA female for antenna

Physical Characteristics:

OEM

Dimension: 87x50x20mm

Weight: 58g

Enclosure

Dimension: 100x55x28mm

Weight: 120g

