



MR-2 Permanent Base Station

High-Performance RTK Positioning

Combines time- and field-proven reliability with all current GNSS constellation/satellite signals as well as future signal capability to form dependability for years to come.

Designed to Network

The MR-2 makes network development and expansion easier than ever, boasting enhanced connection options, including Serial, USB, CAN and Ethernet.

Featuring

- Proven reliability — Building upon proven predecessor, MR-1
- Premier tracking capability — Best-in-class multi-path rejection
- Enhanced connectivity — 8GB of internal storage and range of enhanced connection options

GNSS	
Channels	226 with Universal Tracking Channel Technology
Signals Tracked	GPS: L1 C/A, L1C, L1P(Y), L2P(Y), L2C, L5 GLONASS: L1 C/A, L1P, L2 C/A, L2P, L3C Galileo: E1, E5a, E5b, E5AltBoc BeiDou: B1, B2 SBAS Corrections: WAAS/EGNOS/MSAS QZSS: L1 C/A, L1C, L2C, L5C L-band: Yes (1525-1560 MHz)
Antenna Type	External dual antenna input for heading determination through Topcon HD2 technology
Accuracy	
RTK	H: 5 mm + 0.5 ppm (x baseline length) V: 10 mm + 0.8 ppm (x baseline length)
Static/Fast Static	H: 3 mm + 0.5 ppm (x baseline length) V: 5 mm + 0.8 ppm (x baseline length)
DGPS (RTCM)	H: 0.3 m, V: 0.5 m
SBAS	H: 0.8 m, V: 1.2 m
Heading	0.3°/D*
Inclination	0.5°/D*
Velocity	0.02 m/sec
Time	30 nsec
Data and Memory	
Internal Memory	Up to 8GB for each B125 board
Real Time Data Output	Proprietary TPS format, RTCM SC104 ver. 2.x, 3.0 and 3.1; CMR/CMR+; MSM; NMEA 0183 version 2.x, 3.0, and 3.01
Heading Determination	Yes
Communications	
Antenna Connectors	2x TNC (Antenna power 4.75-5.10 VDC)
Ports	Deutsch DTM Series 12-pin Receptacle for power and communications, Serial (x3), CAN, and PPS on main connector Turck M12 8-Pin Breaks out to RJ45 and SAE power
Environmental	
Temperature	Operating: -40°C to 75°C Storage: -50°C to 85°C
Enclosure	Aluminum alloy
Waterproof Rating	IPX7 (1 meter submersion)
Dust Rating	IP6X (fully dust proof)
Humidity	100%, condensing
Power	
Internal Voltage Range	9-36 VDC Reverse Polarity Protected
Power Consumption	10 W at 9-36 VDC
Physical	
Dimension (w x d x h)	172 x 166 x 49 mm
Weight	0.95 kg
LED Indicators	Power, Ethernet, Primary Antenna, Secondary Antenna

*D = inter-antenna distance in meters