VERSATILITY IN THE FIELD. FLEXIBILITY FOR YOUR WORKFLOW.

Work the way you want with the Trimble® R2 GNSS receiver. Using trusted Trimble technology the R2 receiver gives you the freedom to configure a solution by simply selecting the accuracy and GNSS performance to suit your application. Capable of achieving submeter to centimeter level positioning accuracy the Trimble R2 is the answer to keep you working productively in a wide range of geospatial applications, no matter what your workflow requirements are.

Whether you are performing pole-based stakeouts, surveying on roads, in mines or on construction sites, locating buried assets such as pipes and cables, capturing GIS field assets, or carrying out precision survey measurements, the versatile Trimble R2 is purpose-built for surveyors and mapping and GIS professionals alike.

Simple to setup and easy-to-use, the Trimble R2 pairs with any Trimble handheld, Trimble Access™ controller, or consumer-grade smart device across a variety of operating systems and platforms, to deliver reliable, high quality real-time data every time.

A Simple, Rugged System for Everyday Needs

Built to withstand the rigors in the field, the rugged IP65-rated Trimble R2 receiver will work as hard as you do in tough outdoor conditions. Its one-button start up and compact, streamlined form factor makes it fast to set up and can be operated either mounted on a pole, on a backpack or on a vehicle. The field-swappable battery means all day productivity with no interruptions, keeping you focused on the job at hand.

Technology to Keep you Productive

The Trimble R2 is capable of tracking the full range of GNSS satellite constellations and augmentation systems, and comes with an integrated Trimble Maxwell™ 6 chip and 220 channels to provide you with reliable accuracy and positioning performance. Achieve higher accuracy in real-time with the flexibility to choose correction sources from traditional RTK, VRS networks, to Trimble RTX™ correction services delivered by both satellite and Internet/cellular.

Trimble has evolved its Floodlight™ satellite shadow reduction technology to ensure the R2 receiver is able to provide reliable, accurate data even in difficult GNSS environments. Equipped with this advanced GNSS technology, you can achieve remarkable improvements to position availability and accuracy when heavy overhead cover, such as tree canopy and buildings, obstruct satellite signals, making even tough GIS workflows easier.

A Complete Solution

Connect the Trimble R2 receiver to your preferred controller or mobile device via a wireless Bluetooth™ connection and add proven Trimble field and office software workflows to complete the solution. Data can be collected with the customizable workflows of Trimble field software such as Trimble Access or Trimble TerraFlex™ software that allow your teams to easily collect and communicate information between the field and office in real-time. Collected data can then be processed with Trimble office software, including Trimble Business Center or TerraFlex, providing you with data rich, high-quality deliverables for your organization.

For a simple, configurable, field-to-office solution, the innovative and flexible Trimble R2 GNSS receiver enables you to work accurately and productively your way.
DATASHEET

Trimble R2 GNSS RECEIVER

CONFIGURATION OPTION

Type: Smart antenna
Base operation: Yes, Logging only.
Rover operation: Yes. Rover position update rate: 1 Hz, 2 Hz, 5 Hz. Rover operation within a VRS Now* network: Yes.

MEASUREMENTS

• Advanced Trimble Maxwell 6 custom GNSS chip
• High-performance multiple correlator for L1/L2 pseudo-range measurements
• Unfiltered, unsmoothed pseudo-range measurements data for low noise, low multipath error, low-time domain correlation, and high-dynamic response
• Very low noise carrier phase measurements with <1 mm precision in a 1 Hz bandwidth
• Signal-to-noise ratio reported in dB-Hz
• Trimble EVEREST™ multipath signal rejection
• Proven Trimble low elevation tracking technology

Vertical accuracy: 20 mm + 1 ppm RMS (0.065 ft + 1 ppm RMS)

Horizontal accuracy:
- 4-channel SBAS (WAAS/EGNOS/MSAS/GAGAN)
- 220-channel GNSS
- Proven Trimble low elevation tracking technology

Power consumption:
- 4.95 W (VFD 100%), 3.7 W (VFD 12.5%)

Network RTK2

Internal: Replaceable internal battery 7.4 V, 2800 mA-hr, Lithium-ion

BATTERY AND POWER

Internal: Replaceable internal battery 7.4 V, 2800 mA-hr, Lithium-ion

Data outputs: NMEA, GSOF

MECHANICAL

User interface: LED indicators for receiver status

Dimensions: 14.0 cm (5.5 in) diameter x 11.4 cm (4.5 in) height

Weight: 1.08 kg (2.38 lb) receiver only

ENVIRONMENTAL

Temperature:
- Operating: -20 °C to +55 °C (–4 °F to +131 °F)
- Storage: -40 °C to +75 °C (–40 °F to +167 °F)
- Humidity: 30% to 95% noncondensing

Waterproof: IP65

Pole drop: 2 m (6.6 ft) drop onto all faces and corners on concrete (25C)

Shock:
- Non-operating: To 75 g, 6 ms, saw-tooth
- Operating: To 40 g, 10 ms, saw-tooth

Vibration:
- MIL-STD-810G (Operating), Method 514.6, Procedure I, Category 4, Figure 514.6C-1 (Common Carrier, US Highway Truck

Vibration Exposure) Total Gms levels applied are 1.95 g

INTERNAL ANTENNA

Frequency Range: 1.12/1.2 GHz (GPS, GLONASS, Galileo, BeiDou, QZSS), MSS (RTX), L1 SBAS

COMMUNICATIONS

USB:
- 1 USB 2.0 (Type B) device
- Wi-Fi:
  - 2.4 GHz Bluetooth module

Network protocols:
- HTTP (web browser GUI), NTP Server, TCP/IP or UDP, NTRIP v1 and v2, Client mode, mDNS/uPnP service discovery

Supported data formats:
- Correction inputs: CMR, CMR+, CMR, RTCM 2.x, RTCM 3.0, RTCM 3.1, RTCM 3.2
- Correction outputs: None

CERTIFICATIONS


Contact your local Trimble Authorized Distribution Partner for more information.

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