

Trimble DA2

GNSS RECEIVER FOR THE TRIMBLE CATALYST SERVICE



Simply precise.

Next generation Trimble® Catalyst™ GNSS receiver. DA2 performance scales with your Trimble Catalyst service subscription to deliver anywhere from 1 cm to 60 cm accuracy, and provides support for any field device.

KEY FEATURES

- ▶ Simple, precise, submeter-to-centimeter GNSS accuracy
- ▶ Scalable and flexible accuracy-based pricing
- ▶ Lightweight and rugged design
- ▶ Simple installation and setup
- ▶ Multi-frequency (L1/L2/L5/MSS) capable
- ▶ Powered by Trimble ProPoint® GNSS positioning technology
- ▶ Supports all global GNSS systems
- ▶ Flexible mounting options
- ▶ Connect wirelessly to iOS and Android™ devices
- ▶ Conveniently USB powered

Learn more: geospatial.trimble.com/da2

Trimble DA2 CATALYST GNSS RECEIVER

GNSS PERFORMANCE

SBAS

Horizontal accuracy	0.6 m RMS
Vertical accuracy	1.2 m RMS

Code Differential (DGPS)

Horizontal accuracy	0.3 m + 1 ppm RMS
Vertical accuracy	0.6 m + 1 ppm RMS

Single baseline (<30 km) RTK

Horizontal accuracy	10 mm + 1 ppm RMS
Vertical accuracy	20 mm + 1 ppm RMS

Network RTK

Horizontal accuracy	10 mm + 0.5 ppm RMS
Vertical accuracy	20 mm + 0.5 ppm RMS

Trimble RTX® (using Trimble Corrections Hub)

Horizontal accuracy	2 cm RMS
Vertical accuracy	5 cm RMS

Positioning rate	1 Hz, 5 Hz, 10 Hz
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STATIC GNSS POSITIONING

Static and Fast Static

Horizontal	3 mm + 0.5 ppm RMS
Vertical	5 mm + 0.5 ppm RMS

Post-Processed Kinematic¹ Centimeter / Decimeter Configurations

Horizontal accuracy	10 mm + 1 ppm RMS (0.033 ft + 1 ppm RMS)
Vertical accuracy	20 mm + 1 ppm RMS (0.065 ft + 1 ppm RMS)

Post-Processed Kinematic Sub-meter Configurations¹

Horizontal accuracy (baselines up to 30 km)	1 cm + 1 ppm RMS
Vertical accuracy (baselines up to 30 km)	2 cm + 1 ppm RMS
Horizontal accuracy (baselines over 30 km)	50 cm + 1 ppm RMS

SIGNAL TRACKING

- Trimble ProPoint GNSS positioning technology for improved accuracy and productivity in challenging GNSS conditions²
- GPS: L1C/A, L2C, L5
- GLONASS: L1C/A, L2C/A
- SBAS: L1C/A, L2C, L5
- Galileo: E1, E5A
- BeiDou: B1I, B1C, B2A
- QZSS: L1C/A, L2C, L5
- NavIC (IRNSS): L5
- Digital channels: All supported signals in view, software-controlled³

Notes on Specifications and Testing Procedures

Mechanical performance testing was performed by Trimble with production quality DA2 devices. GNSS performance testing was performed by Trimble with production quality DA2 devices. GNSS performance is dictated by the Catalyst subscription type in use. GNSS accuracy may be affected by anomalies such as multipath, satellite geometry, atmospheric conditions, and proximity to obstructions such as trees, mountains, buildings and other structures. Accuracy specifications are valid in normal conditions with clear line of sight to the sky. Accuracy may degrade quickly and significantly under any of the aforementioned anomalous conditions.

MECHANICAL

Dimensions (Diameter x Depth)	128 x 55 mm
Weight	330 g (11.6 oz)
Ingress protection level	IP65 (dust proof, rain proof)
Drop, shock, & vibration	Survives 2 m tipping falls Survives 1.2 m free falls to concrete Survives vibrations & mechanical shocks (MIL-STD-810G test method)

Supported Platforms

Android	Android 5.0 (Pie) and higher
iOS	iOS 13.0 and higher

COMMUNICATIONS/CONNECTIVITY

Bluetooth®	4.2
Apple	Made for iOS certified
Ports	USB-A (Power only)
Data protocols	NTRIP, VRS, RTCM 3.2 MSM, CMRx, DCOL
Position output	NMEA (LLH), DCOL Android Location Service Apple Location Service Android Location Extras

BATTERY AND POWER

Requires external USB battery pack	
External power input	USB-A (5 V 1 A)
Power consumption	2.0–2.5 W

ENVIRONMENTAL

Operating ambient temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Operating humidity	95% RH, non-condensing
Operating altitude	Tested to 9,000 m (29,500 ft)

COMPLIANCE

USA: FCC Part 15 (Class B device), Canada: ICES-003; Europe: CE; UK: UKCA; Australasia: RCM. For latest compliance status geospatial.trimble.com/DA2-compliance

IN THE BOX

- Catalyst DA2
- 5/8" thread mount
- USB power cable
- Battery clamping kit
- Documentation

OPTIONAL ACCESSORIES FROM TRIMBLE

- 1/4" thread mount
- Locking 5/8" thread mount
- USB battery pack
- Soft pouch
- 2 m carbon fiber pole
- 2 m aluminium pole
- Antenna backpack, and more

- Accuracy and reliability may be subject to anomalies such as multipath, obstructions, satellite geometry, interference and atmospheric conditions. Always follow recommended practices. Specified DA2 Centimeter/Decimeter carrier (post-processed) accuracy can normally be achieved for baseline lengths of 100 km or less. Carrier post-processing accuracy requires at least 2 minutes of carrier data.
Note: Post-processing results will vary depending on the accuracy of the Catalyst subscription.
- Challenging GNSS environments are locations where the receiver has sufficient satellite availability to achieve minimum accuracy requirements, but where the signal may be partly obstructed by and/or reflected off of trees, buildings, and other objects. Actual results may vary based on user's geographic location and atmospheric activity, scintillation levels, GNSS constellation health and availability, and level of multipath and signal occlusion.
- Based on current GNSS constellations and signal configurations the DA2 can process all supported GNSS signals available by Catalyst dynamic signal tracking.



Specifications subject to change without notice.

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