

Trimble DA2

GNSS RECEIVER FOR THE
TRIMBLE CATALYST SERVICE

The DA2 combined with the
Trimble Catalyst positioning
service simplifies access to
precise positioning workflows.



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

Lightweight and rugged design.

Scalable and flexible accuracy-based pricing.

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.

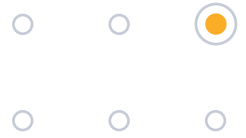
Conveniently USB powered.



Find out more at:
geospatial.trimble.com/da2

Trimble DA2

Catalyst GNSS receiver



GNSS PERFORMANCE¹

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) ²		
	Horizontal accuracy	2 cm RMS
	Vertical accuracy	5 cm RMS
	Positioning rate	1 Hz, 5 Hz, 10 Hz

STATIC GNSS POSITIONING

Static and Fast Static		
	Horizontal	3 mm + 0.5 ppm RMS
	Vertical	5 mm + 0.5 ppm RMS
Post-Processed Kinematic ³ 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 Configurations ³		
	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 conditions⁴

GPS: L1C/A, L2C, L5

GLONASS: L1C/A, L2C/A

SBAS: L1C/A, L2C, L5

Galileo: E1, E5A

BeiDou: B1, B1C, B2A

QZSS: L1C/A, L2C, L5

NavIC (IRNSS): L5

L-band: Trimble RTX corrections (using Trimble Corrections Hub)

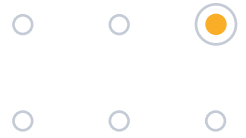
Digital channels: All supported signals in view, software-controlled⁵

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.

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Catalyst GNSS receiver



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

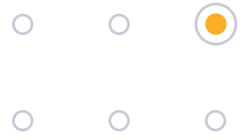
For latest compliance status help.fieldsystems.trimble.com/trimble-catalyst/da2-compliance.htm

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



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Catalyst GNSS receiver



- 1 Precision and reliability may be subject to anomalies such as multipath, obstructions, satellite geometry, interference and atmospheric conditions. The specifications stated recommend the use of stable mounts in an open sky view, interference and multipath clean environment, optimal GNSS constellation configurations, along with the use of survey practices that are generally accepted for the applicable application.
- 2 Achievable accuracy and initialisation time may vary based on the user's geographic location, available service and atmospheric activity, scintillation levels, GNSS constellation health, availability, and level of multipath and obstructions such as large trees and buildings.
- 3 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.
- 4 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.
- 5 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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