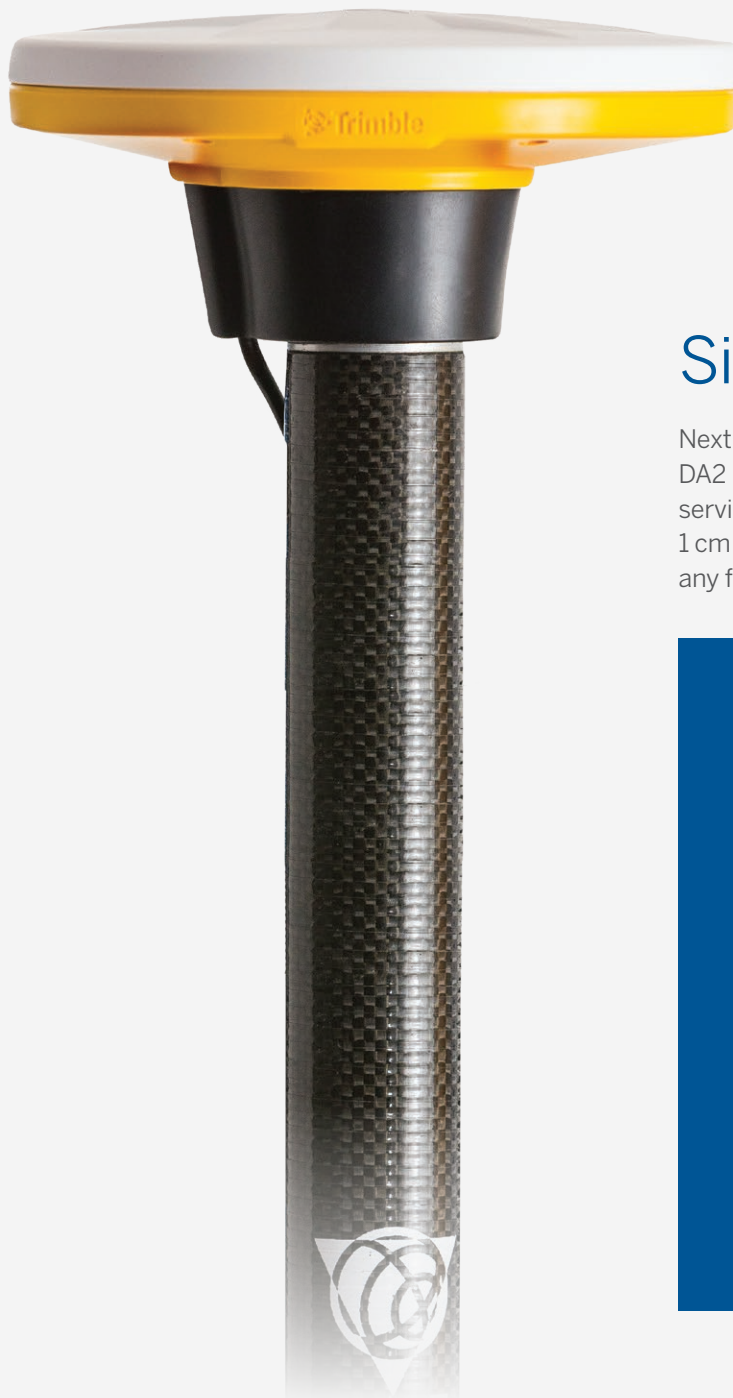# Trimble DA2

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

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

STATIC GNSS POSITIONING

Static and Fast Static
Horizontal . . . . 3 mm + 0.5 ppm RMS
Vertical . . . . 5 mm + 0.5 ppm RMS

Post-Processed Kinematic[1] 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[1]
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 conditions[2]
• 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-controlled[3]

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
• ⅝" thread mount
• USB power cable
• Battery clamping kit
• Documentation

OPTIONAL ACCESSORIES FROM TRIMBLE
• ¼" thread mount
• Locking ⅝" thread mount
• USB battery pack
• Soft pouch
• 2 m carbon fiber pole
• 2 m aluminium pole
• Antenna backpack, and more

1 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.
2 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.
3 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.