DATASHEET

Trimble SiteVision

AUGMENTED REALITY SYSTEM

* Tablet not included.

KEY FEATURES

- Accurately places and displays 2D/3D data in real world context from any angle at true-to-life scale
- Precisely locates and reveals hidden assets
- Combines Trimble® Catalyst™ GNSS centimeter level positioning with Google® and iOS AR technology
- Automatically transforms complex 2D designs into visual 3D models
- Switches between 2D and 3D views
- Provides Trimble cloud-based data hosting and reporting tools
- Enables collaboration and communication of designs on the job site
- Compatible with a wide range of Trimble, open industry standard, and third-party file formats
- Lightweight, portable pole-mounted unit

Learn more:
geospatial.trimble.com/sitevision

Trimble SiteVision AUGMENTED REALITY SYSTEM

HARDWARE

TRIMBLE DA2 CATALYST GNSS RECEIVER[1,2]

GNSS position accuracy

In RTK coverage[3]: . . . . . Hz: 1 cm + 1 ppm RMS Vt: 2 cm + 1 ppm RMS
In Trimble RTX® technology coverage:. . . . . Typically 2 – 20 cm In North America and Western Europe[4]
Typically < 50 cm In the rest of the world[4]

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

SIGNAL TRACKING

- Trimble ProPoint® GNSS positioning technology for improved accuracy and productivity in challenging GNSS conditions[5]
- GPS: L1C/A, L2C, L5
- GLONASS: L1C/A, L2C/A
- SBAS: L1C/A, L2C, L5
- Galileo: E1, E5A
- BeiDou: B1, B2A
- QZSS: L1C/A, L2C, L5
- NavIC (IRNSS): L5
- Digital channels: Software controlled by Catalyst dynamic signal tracking using mathematical channels

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 visit:
help.trimblegeospatial.com/Catalyst/DA2-compliance.htm

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

Trimble SiteVision AUGMENTED REALITY SYSTEM

SOFTWARE

Model placement
- Automatic with Georeferenced data
- Measured (cm)
- Manual
- QR Markers

Supported formats
- Trimble: SKP, VCL, TTM, TrimBIM, TMAP & Tekla®
- Open industry standards: IFC, LandXML
- 3rd party: DWG, SHP, GDB, PNG, DWG/DXF, RVT, NWD/NDC, WFS, DGN, TFLX & PDF

Connectivity (model data)
- Cellular or Wi-Fi, via user supplied mobile phone

Connectivity (correction data)
- Cellular or Wi-Fi, via user supplied mobile phone
- L-band satellite for remote operations

Data interpretation
- User defined rules & 3D symbols

Measurement and recording functions
- Georeferenced photo
- ToDo's
- Tasks
- Points
- Grade
- Distance
- Cut/Fill
- Volumes
- Area

Measurement methods
- GNSS
- AR model measurement
- Lidar
- Camera

Measurement modes
- Model point to model point
- Ground point to model point
- Ground point to ground point

Minimum phone requirements
- Powered by Android 9.0 or later, that is supported by the Google AR technology
- Powered by iOS 13 and later, from the iPhone 6s and iPad (2017) onwards, that is supported by the Apple ARKit technology

SUBSCRIPTION INCLUDES

GNSS correction services
- Trimble SiteVision™ Precision Service including Trimble VRS Now™ and Trimble RTX
- Use of other third party VRS correction services may involve an additional cost from the 3rd party service provider

Cloud storage
- Trimble Cloud services

1 Performance depends heavily on many contributing factors. Accuracy and reliability may be subject to anomalies such as multipath, satellite geometry, atmospheric conditions, and proximity to obstructions such as trees, mountains, buildings, and other structures.
2 Applies to DA2 GNSS receiver only, not user provided mobile device.
3 Using Trimble VRS Now, third party VRS networks or internet connected base stations using Trimble Internet Base Station Service (IBSS) or similar services
4 See the Trimble Global Coverage maps for more details for more details: https://positioningservices.trimble.com/resources/coverage-maps/
5 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.

Specifications subject to change without notice.

DATASHEET

Trimble SiteVision AUGMENTED REALITY SYSTEM

Contact your local Trimble Authorised Distribution Partner for more information

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