# Trimble Catalyst

## SOFT GNSS SOLUTION

## High Accuracy Positions on Your Device

Collect accurate data faster and easier by simply plugging the Trimble® Catalyst™ DA1 antenna into your Android™ tablet or smartphone. Select the subscription that matches your accuracy needs and choose the applications that meet the needs of your workflow.

## Trimble Corrections Hub

Trimble Corrections Hub offers a zero-configuration solution for choosing the best correction source available to you in your current location. The Trimble Catalyst system will choose between SBAS, Trimble RTX, or Trimble VRS Now GNSS corrections depending on your subscription and location while the Trimble Corrections Hub operates in a common datum, dynamically switching as required based on your correction source. Furthermore, you can configure your device to connect to third party correction sources for when you're outside the Trimble VRS Now coverage area; this requires a Sub-meter, Precision or Decimeter subscription.

## Subscribe to an Accuracy Level Based on Your Needs

Trimble offers various subscriptions of Trimble Catalyst with the ability to adjust as your needs change. Subscriptions are based on positional accuracy and start at one Meter. Intermediate subscriptions include Sub-meter and Decimeter variants, and for the user that requires maximum accuracy, a Precision subscription is available.

## Apps From Trimble and Third Party Trimble Partners

Trimble Catalyst will not only work with applications from Trimble, but also with a variety of apps developed by Trimble partners. For a complete list of Catalystenabled third party apps please see catalyst. trimble.com Trimble Catalyst can also be used with any third party application that is not Catalyst-enabled by sharing its position over location services on your Android device.

# Mounting Options for Trimble Catalyst DA1

The Trimble Catalyst DA1 antenna can be mounted on a standard % inch thread. The threaded adapter is designed to be either unscrewed after each use, or simply left on the pole and pushed on to fit the rubber housing on the bottom of the antenna. Additionally, it can be mounted on a rigid pole with a 1 ½ inch (32 mm) diameter for applications where mounting on the threaded adapter is not optimal.

## **Key Features**

- Cutting-edge Trimble Catalyst positioning technology on your Android smartphone or tablet
- Positional accuracy based on your needs—1 Meter, Sub-Meter, Decimeter, or Precision
- A variety of apps available from both Trimble and third party partners
- Several mounting options for the Trimble Catalyst DA1 antenna and more to come
- Automatic datum handling via Trimble Corrections Hub





## Trimble Catalyst SOFT GNSS SOLUTION

#### PERFORMANCE SPECIFICATIONS

#### **Features**

- Satellite signals tracked simultaneously:
  - GPS: L1C/A, L2C
  - Galileo: E1
  - SBAS: L1C/A WAAS, EGNOS, GAGAN, L1 SAIF QZSS
  - MSS (or L-band): Trimble RTX
- Trimble RTX correction services
- Real-time message formats: RTCM 3.0, RTCM 3.1, RTCM 3.2 (recommended)
- Positioning Rates: 1 Hz, 5 Hz

#### POSITIONING PERFORMANCE

1 Meter Subscription Positioning	
Horizontal	
Vertical	1 m RMS
Typical time to first 1 m accuracy positioning	1 minute
Sub-Meter Subscription Positioning	
Horizontal	0.30 m RMS
Vertical	0.30 m RMS
Typical time to first sub-meter accuracy positioning	1 minute
Decimeter Subscription Positioning	
Declineter Subscription Fositioning	
Horizontal	10 cm RMS
Horizontal	10 cm RMS
HorizontalVertical	10 cm RMS
Horizontal  Vertical  Typical time to first decimeter accuracy positioning	10 cm RMS 2 minutes
Horizontal.  Vertical  Typical time to first decimeter accuracy positioning  Precision Subscription Positioning	10 cm RMS 2 minutes m + 1 ppm RMS
Horizontal.  Vertical  Typical time to first decimeter accuracy positioning  Precision Subscription Positioning  Horizontal.  10 m.	10 cm RMS 2 minutes m + 1 ppm RMS m + 1 ppm RMS

For all positioning subscription levels with Trimble Catalyst, 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. Positional accuracy specifications for Trimble Catalyst subscription levels are validated in normal conditions with clear lines of sight to the sky and positional accuracy may degrade quickly and significantly under any of the aforementioned anomalous conditions. If outside of the Trimble VRS Now network and not configured to use a third party network connection, accuracy may be affected. The Trimble VRS Now coverage map is located here.

Specifications subject to change without notice

#### HARDWARE - TRIMBLE CATALYST DA1 DIGITAL ANTENNA

Temperature	
Operating	20° C to +60° C (-4° F to +140° F)
Storage	
Humidity	
Ingress Protection	IP65
Shock and vibration Tested an	id meets the following environmental standards:
Shock Non-operating: Designed	to survive a 2 m (6.6 ft) pole drop onto concrete
	D-810G, Method.514.6 Procedure 1 Category 24
Altitude	STD-810G Low Pressure/Altitude Method 500.5,
	Procedures I, II and III (9000 m/29,500 ft)
Chemical Resistance	. MIL-STD 810G test method 504.1 Procedure 1

#### ELECTRICAL - TRIMBLE CATALYST DA1 DIGITAL ANTENNA

- Power consumption is 0.6 W typical (0.85 W maximum)
   Operating times depend on device and use of external power
- · Micro USB port for external power

## **CERTIFICATIONS**

FCC Part 15 (Class B device), ICES-003, CE Mark, C-tick

## SUPPORTED ANDROID DEVICES

Use the Trimble Catalyst DA1 digital antenna with Android devices that meet the following requirements:

- Certified USB On-The-Go
- Have an operating system of Android 5.0 or greater
- Have more than 1.4 GB of RAM
- Have a CPU of at least 1.4 GHz and 4 or more cores

When only meeting these minimal requirements, the Trimble Catalyst system may not perform optimally, especially with applications that require high CPU power. For best performance, use devices with Qualcomm\* Snapdragon\*\* 800 processors or greater, or devices that have been tested and validated by Trimble. A list of devices tested and validated by Trimble is maintained at catalyst.trimble.com.

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