Data Sheet



Acutime™360 Multi-GNSS Smart Antenna

KEY FEATURES

- Multi-Constellation
- Simultaneous GPS / GLONASS or GPS / Beidou tracking
- Superior sensitivity
 - ✓ Tracking -160dBm
 - ✓ Acquisition-148dBm (cold)
- Weatherproof and corrosion resistant housing
- Extended temperature range (-40°C / +85°C)

Multi-GNSS Smart Antenna

The Trimble® Acutime™360 Multi-GNSS (GPS, GLONASS, Beidou, Galileo-ready) smart antenna is latest Acutime product of integrated GNSS technology in a rugged and weatherproof self-contained unit.

The Acutime[™]360 is an integrated pipe thread-mounted multi-GNSS receiver, antenna and power supply solution in a single environmentally sealed easy to install enclosure.

Demonstrated Performance

The Acutime[™]360 design continues the Trimble line of GNSS smart antennas, which have been in production since 1991. The Acutime[™]360 is optimized for precise timing and network synchronization needs, including broadband wireless applications.

It provides a cost effective and independent timing source (within the firewall) for any application, such as fault detection systems and synchronization of wireless networks...



Power Efficiency & Performance

The Acutime[™]360 Multi-GNSS smart antenna requires less than 1 Watt to operate. Once power is applied, the Acutime[™]360 smart antenna automatically tracks satellites and surveys its position to within meters. It then switches to overdetermined time mode and generates a pulse-persecond (PPS) output synchronized to UTC within 15 nanoseconds (one sigma), outputting a time tag for each pulse

Acutime™360 Starter Kit Option

The Acutime[™]360 Starter Kit makes it easy to evaluate the exceptional performance of this multi-GNSS smart antenna and integrate advanced technology into your system..



ACUTIME™ 360 MULTI-GNSS SMART ANTENNA

GENERAL SPECIFIATIONS

Receiving SignalGPS, GLONA	ASS, Galileo ¹ , Beidou
Positioning System	SPS, Timing
1 PPS Timing Accuracy	15 ηs (1 sigma)
Update Rate	1 Hz
Typical Min Acq Sensitivity	148dBm cold start
Typical Min Tracking Sensitivity	
Time to First Fix ² <46s (50%),	<50s (90%) cold start
Typical Time to Re-acquisition	<2s (90%)
Accuracy Horizontal Position<6	5m (50%), <9m (90%)
Accuracy Vertical Position <11r	m (50%), <18m (90%)

¹ Hardware ready: a firmware update is required to enable the Galileo constellation.

INTERFACE CHARACTERISTICS

Serial Port	2 serial port
Protocols	TSIP, NMEA 0183
All ports support baud rates 4.8-115.2k	bps; 8 data bits; E, O or no parity.

ELECTRICAL CHARACTERISTICS

Power+5VDC ³ to +36VDC, reverse polarity prote	ction
Power Consumption<1.	0Watt

¹Reduced cable length @+5VDC to +12VDC

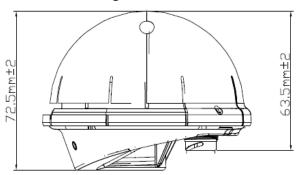
ENVIRONMENTAL SPECIFICATIONS

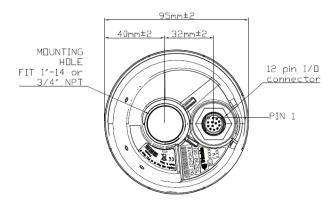
Operating Temperature	40°C to +85°C
Operating Humidity5%-95% RH	non-condensing (+60°C)
Storage Temperature	55°C to +105°C
Ingress Protection	IP67
EMC	CE, FCC Class B

PHYSICAL CHARACTERISTICS

Dimensions	95mm x 72.5mm
	(3.74" D x 2.85" H)
Weight	5.4oz (154grams)
Connector	12-pin round, waterproof
Mounting1"-14	straight thread or ¾" pipe thread

Mechanical Drawing





Visit <u>www.trimble.com/timing</u> for part numbers and information about where to buy.

 ${\it Parts~of~the~product~are~patent~protected}.$

Trimble has relied on representations made by its suppliers in certifying this product as RoHS-II compliant

 ${\it Specifications \ subject \ to \ change \ without \ notice}.$

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² The performance criteria and times given for TTFF & reacquisition are with GPS satellites in the constellation set.