

# SMART Antennas

High-precision GNSS receiver & high-performance antenna in a compact, rugged enclosure



# Hexagon | NovAtel

## SMART Antennas



### SMART7

A rugged, self-contained GNSS receiver and antenna that tracks multiple constellations and multiple frequencies. Also provides TerraStar Correction Service signal reception and dual-frequency GLIDE. Terrain Compensation is optionally available as a software upgrade.



### SMART7-S

A rugged, self-contained GNSS receiver, antenna and IMU that provides a single enclosure SPAN solution for attitude information, terrain compensated positions and bridging of GNSS outages. Also provides TerraStar Correction Service signal reception and dual-frequency GLIDE.



### RELAY7

The RELAY7 RTK rover radio module attaches to NovAtel's SMART7 to create a single unit for easy system integration. (SMART7 is purchased separately.) 400 MHz or 900 MHz UHF radio options



### SMART2

A compact, self-contained GNSS receiver and antenna with dual-frequency, multi-constellation signal tracking. Also provides TerraStar Correction Service signal reception and optional dual-frequency GLIDE. Hardware options available for Bluetooth® connectivity and Terrain Compensation.



### AG-STAR

A self-contained receiver and antenna that is ideal for agricultural environments. It features sub-meter real-time accuracy with optional GLONASS and Bluetooth. Optional GLIDE is also available.

## POSITIONING ACCURACY (LEVEL)

Meter (RMS / 95%)		Sub Meter (RMS / 95%)		Centimeter (RMS / 95%)	
Single Point L1	Single Point L1/L2	SBAS	DGPS	TerraStar-L <sup>a</sup>	TerraStar-C PRO <sup>a</sup>
1.5 m 2.5 m	1.2 m 2.4 m	60 cm 120 cm	40 cm 80 cm	40 cm 50 cm	2.5 cm 3 cm
1.5 m 2.5 m	1.2 m 2.4 m	60 cm 120 cm	40 cm 80 cm	40 cm 50 cm	2.5 cm 3 cm
1.5 m 2.5 m	1.2 m 2.4 m	60 cm 120 cm	40 cm 80 cm	40 cm 50 cm	2.5 cm 3 cm
1.5 m 2.5 m		70 cm 140 cm	50 cm 100 cm		

a. Requires subscription to TerraStar data service. Subscriptions available from NovAtel

## SOLUTIONS

			Optional	Optional	RTK ASSIST <sup>a</sup>
			Optional	Optional	RTK ASSIST PRO <sup>a</sup>
			Optional	Optional	ALIGN Heading
			+		Integrated SPAN
Optional	Optional		+	+	GLIDE
	Optional			Optional	Terrain Compensation
+	+		+	+	Emulated Radar

## SIGNAL TRACKING

L1	L1, L2, L2C		L1, L2, L2C, L5	L1, L2, L2C, L5	GPS
L1	L1, L2		L1, L2	L1, L2	GLONASS
	E1, E5b		E1, E5a, E5b, E5 AltBOC	E1, E5a, E5b, E5 AltBOC	Galileo
	B1I, B2I, B2b		B1I, B1C, B2I, B2a, B2b	B1I, B1C, B2I, B2a, B2b	BeiDou
	L1, L2		L1, L2	L1, L2	QZSS
+	+		+	+	SBAS
	+		+	+	L-Band
14	167		555	555	Number of Channels

## INTERFACES

2	3	2 <sup>b</sup>	3	3	Serial Ports
1	1	1	1	1	CAN
			Optional	Optional	Ethernet
			Optional	Optional	Wi-Fi
Optional	Optional				Bluetooth

10 Hz	20 Hz		20 Hz (GNSS) 200 Hz (INS)	20 Hz	Maximum Data Rate
+8 to +36 VDC	+7 to +30 VDC	+7 to +30 VDC	+7 to +30 VDC	+7 to +30 VDC	Input Voltage
2.5 W	2.5 W	2 W	4 W	4 W	Power Consumption (typical)
155 x 68	155 x 81	187 x 200 x 76	220 x 192 x 66	220 x 192 x 66	Dimensions (mm)
<490 g	<470 g	<850 g	<1.1 kg	<1.1 kg	Weight
14-pin Tyco AMPSEAL	14-pin Tyco AMPSEAL	TNC female jack, 14-pin Tyco AMPSEAL	14-pin Tyco AMPSEAL Optional M12 D-Coded	14-pin Tyco AMPSEAL Optional M12 D-Coded	Connector

b. SMART7 serial and CAN ports passed through the RELAY7.

# About Hexagon | NovAtel

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications. Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

NovAtel, part of Hexagon, is a global technology leader, pioneering end-to-end solutions for assured positioning for land, sea, and air. NovAtel designs, manufactures and sells high precision positioning technology developed for efficient and rapid integration. Its solutions are empowering intelligent positioning ecosystems in vital industries that depend on the ability to tackle the most complex challenges in the most demanding environments. Learn more at [novatel.com](http://novatel.com).

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