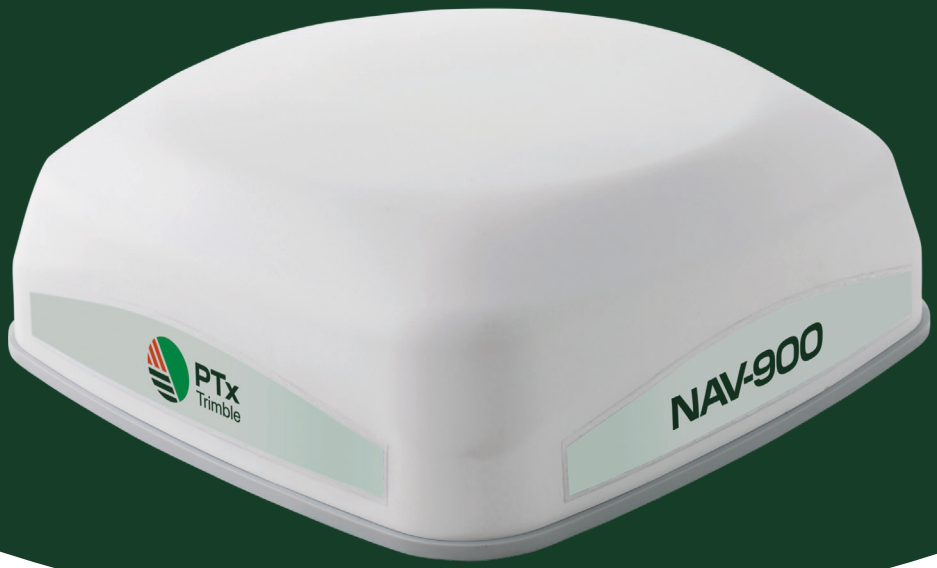
DATASHEET

NAV-900

Guidance Controller

The NAV-900 guidance controller is our most advanced GNSS receiver to date, built for maximum uptime and a wide range of accuracy options from basic to high precision. It is designed to mount on the roof of most agricultural vehicles to provide positioning and guidance, including autosteer.



Key Features

- Full range of correction signals including GPS, GLONASS, Galileo, Beidou, and QZSS constellations
- Built in Bluetooth® for tethering, and device connections
- Simplified setup with fewer components
- Combine with one of the GFX series displays for auto guidance and precision farming functions

Easy Installation

Designed from the ground up to install quickly, the NAV-900 guidance controller along with a compatible GFX series display can be installed with an autoguidance system in just half a day in most vehicles or in under two hours if using manual guidance, eliminating costly downtime in the field.

Expanded GNSS

This new guidance controller features PTx Trimble's most powerful GNSS engine. It tracks more satellites from more constellations, leading to more robust performance in harsh environments and also faster RTX convergence time.

PTx Trimble

ptxtrimble.com

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NAV-900

Guidance Controller

Guidance	
Electric	Autopilot™ Motor Drive Solutions
Guidance Ready	CANBus J1939
Hydraulic	External NavController III Autopilot
Housing & Mechanical	
Housing Material	Low-profile, chemical-resistant polymer casing with UV-resistant paint
Size	8.3 in × 8.3 in × 3.1 in (W × D × H) 213 mm × 213 mm × 80 mm
Weight	1.2 kgs
Mounts	Trimble custom, OEM compatible*, Spar*
Connectors	
To GFX-750™ display	M12 4-pin connector
To External Radio	M12 5-pin connector
For I/O	Deutsch 12-pin connector
Communication and I/O	
Bluetooth	Bluetooth 4.1
Serial Ports	1 TX/RX, 1 TX only
CAN Ports	2
BroadR-Reach	Port: 1
Digital Out	Sonalert
Analog In	Remote Engage
NIMEA Output	1, 5, 10, Hz

Inertial Measurement Unit (IMU)	
Gyroscope	3-axis, 200 Hz
Accelerometer	3-axis, 200 Hz

Operational Range	
Operating Temperature	-40 °C to +70 °C (-40 °F to +158°F)
Storage Temperature	-40 ºC to +85 ºC (-40 °F to +185°F)
Humidity	up to 100%, condensing
Ingress Protection	IP66, dustproof, waterproof, IPx9K
GNSS Receiver Specifications	
Constellations	GPS: L1 C/A, L1C, L2E, L2C, L5
	GLONASS: L1 C/A, L1P, L2P, L2 C/A, L3 CDMA
	Galileo: E1, E5A, E5B, E5AltBOC
	BeiDou: B1C, B1I, B2I, B2A
	QZSS: L1 C/A, L2C, L5
Satellite Corrections	CenterPoint® RTX Fast
	CenterPoint RTX correction service
	RangePoint® RTX correction service
	SBAS (WAAS, EGNOS, SLAS)
	xFill® technology
Land-Based Corrections	CenterPoint RTK
	CenterPoint VRS
Correction Formats	CMR+, sCMR+, sCMR+ with SecureRTK, CMRx, RTCM 3.0, RTCM 3.1, RTCM 3.2, RTCM 3.3
GNSS Receiver Specifications	
Power	9 - 16 VDC, 5.5 W 17.5 W with external accessories connected
Output Power	12 VDC, 12 W Maximum current for external radio: 1 A

* optional accessory

Correction Type	Pass to Pass Accuracy	Year-to-Year Repeatability	Convergence
RTK[1,3]	2.5 cm	2.5 cm	Instant
VRS[1,3]			
CenterPoint RTX[1,3]			< 5 min in standard coverage regions for Trimble ProPoint® devices < 2 min in Fast coverage regions for Trimble ProPoint devices < 20 min in standard coverage regions
RangePoint RTX[1,3]	15 cm	50 cm	< 5 minutes
Uncorrected[2,3]	30 cm	> 1 meter	Instant

1. 95% 2-dimensional horizontal performance based on repeatable in field measurements.
2. 68% (RMS) 1-dimensional horizontal performance based on repeatable in field measurements.
3. Achievable accuracy and initialization time may vary based on type and capability of receiver and antenna, user's geographic location, atmospheric activity, GNSS constellation health and availability, and level of multipath including obstructions. Pass to Pass measurements are within 15 minutes.

Vantage Australia
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Contact your PTx Trimble Reseller today

PTx Trimble

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