DATASHEET

NAV-500

Guidance Controller

Paired with any GFX series display, the NAV-500™ guidance controller is an affordable precision solution capable of receiving corrections from multiple GNSS satellite constellations. Get sub-metre repeatable accuracy and full-farm coverage at a great price to use during tillage, broad-acre seeding, spraying and harvest.



Key Features

- Low-profile rugged housing
- Trimble® ViewPoint RTX™ correction service
- 5 satellite constellations
- Roll-corrected manual guidance
- Compatible with EZ-Steer® assisted steering system and EZ-Pilot® Pro steering system
- 4.1 Bluetooth®
- Multiple CAN ports



PTx Trimble

ptxtrimble.com

DATASHEET

NAV-500

Guidance Controller

Housing & Mechanical	
Housing Material	Low-profile, chemical-resistant polymer casing
Size	7.1 in × 7.1 in × 2.9 in (W × D × H) (180 mm × 180 mm × 74 mm)
Weight	External NavController III Autopilot™
Mounts	22.6 oz (0.640 kgs)
Power	
Power	9-16 V DC, 3.5 W
Connections	
To GFX Series Displays	M12 4-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	1
Digital Out	Sonalert
Analog In	Remote Engage
NIMEA Output	1, 5, 10, Hz

Inertial Measurement Unit (IMU)	
Gyroscope	3-axis, 50 Hz
Accelerometer	3-axis, 50 Hz
External IMU Needed for EZ-Pilot Pro	57407-01
Operational Range	
Operating Temperature	-30 ºC to +70 ºC (-22 °F to +158 °F)
Storage Temperature	-40 ºC to +85 ºC (-40 °F to +185°F)
Humidity	100% Condensing
Ingress Protection	IP66
GNSS Receiver Specifications	
Constellations	GPS: L1 C/A
	GLONASS: L1 C/A, L1P
	Galileo: E1
	Beidou: B1
	QZSS: L1 C/A
Satellite Corrections	ViewPoint RTX
	SBAS (WAAS, EGNOS, GAGAN, MSAS)
	SBAS +
Guidance	
Electric	EZ Pilot, EZ-Pilot Pro, EZ-Steer

* optional accessory

Correction Type	Pass to Pass Accuracy (1-D)*	Year-to-Year Repeatability (1-D)*	Convergence
ViewPoint RTX	15 cm	Sub-metre	< 5 minutes
SBAS	20 cm	Instant	
Uncorrected	30 cm	> 1 meter	

* 68% (RMS) 1-dimensional horizontal performance based on repeatable in field measurements. Achievable accuracy and initialisation time may vary based on type and capability of receiver and antenna, user's geographic location and atmospheric activity, scintillation levels, GNSS constellation health and availability and level of multipath including obstructions such as large trees and buildings. Pass to Pass measurements are within 15 minutes.

Contact your PTx Trimble Reseller today

PTx TRIMBLE
10368 Westmoor Drive
Westminster, CO 80021
USA
+1-720-887-6100 Phone
+1-720-887-6101 Fax

© 2025, PTx Trimble LLC. All rights reserved. PTx and associated Logo are trademarks of AGCO Corporation and are used under license. Trimble, the Globe & Triangle logo, Autopilot, EZ-Pilot, EZ-Steer, NAV-500 and ViewPoint RTX are trademarks of Trimble Inc., and used under license by PTx Trimble. The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by PTx Trimble Inc. is under licence. Galileo is developed under a Licence of the European Union and the European Space Agency. All other trademarks are the property of their respective owners. PN 022503-2070 (01/25)

PTx Trimble

ptxtrimble.com