

JANUS REMOTE COMMUNICATIONS

PRODUCT BRIEF

Wi-Fi Terminus NT-110ST Wi-Fi Enabled GPS Module

Description

The Wi-Fi Terminus NT-110ST combines GPS technology with Wi-Fi transport. Incorporating NavSync's ultra-sensitive GPS receiver, the NT-110ST provides an 802.11 b/g transmission containing NMEA streams, giving device location (longitude and latitude) and UTC time. The 802.11 b/g supports WPA2 encryption and is fully configurable to a specific network.

The enhanced NT-110ST is intended for TCP or UDP transmissions of GPS data. The unit is capable of sending out a variety of NMEA GPS messages, selectable and at a rate configurable by the user.

The NT-110ST offers continuous operation and exceptional tracking accuracy. Additionally, the NT-110ST features a rechargeable lithium ion battery and flash storage on-board for storing GPS data when a Wi-Fi network is not detected. This data can be safely stored and sent out once the Wi-Fi network is detected.

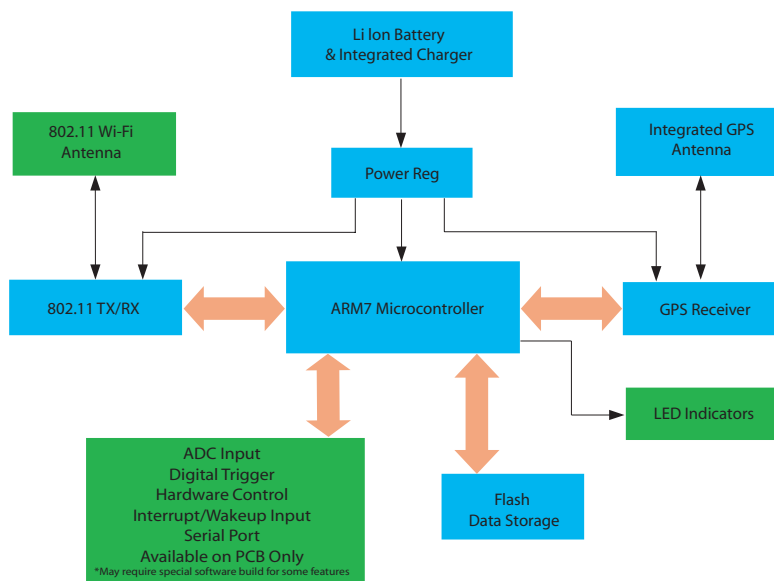
Please contact the factory for specifics as custom firmware may be required.



Features

- Sensitive GPS Receiver with Tracking as Low as -150dBm
- 802.11b/g Compliant
- WPA2 Encryption
- Integrated Rechargeable Battery
- User Programmable Update Rates
- Internal Flash Memory for Saving GPS Data
- Indicators for Battery Charging Status, GPS Fix Status, and Network Status Operation

Block Diagram



2111 Comprehensive Drive
Aurora, Illinois 60505
630.499.2121
Fax: 630.851.5040
www.janus-rc.com

Bulletin	JA10-PB ST
Revision	01
Date	13 May 2011



Making machines talk.

Wi-Fi Terminus NT-110ST Wi-Fi Enabled GPS Specifications

GPS Receiver Specifications

Physical	Description	Notes
Module Dimensions	3.773" (W) x 3.149" (H) x 1.253" (D) 95.83mm (W) x 79.98mm (H) x 31.83mm (D)	
GPS Performance		
GPS Channels	16	
Frequency	1575.42 MHz – L1 C/A Code	
TTFF Cold Start @ -135 dBm	46 seconds	1, 4
Re-acquisition Time @ -147 dBm	< 3 seconds	2
Tracking Sensitivity (dBm)	-150 dBm	3
Static Accuracy 50% Confidence (CEP)	2 m	4
95% Confidence	4 m	
Maximum Horizontal Speed	515 m/s	5
Maximum Vertical Speed	15 m/s	6
Maximum Altitude	18 Km	7
Maximum Acceleration (g)	2 g	

Wi-Fi Specifications

Wi-Fi Performance		
Maximum Transmit Power	15 dBm	
Transmission Speed	1Mbps	
General Specifications		
Power (Avg.) Transmitting:	~1.1W	
Operation When Not Transmitting	<0.5W	
Internal Li Ion Rechargeable Battery	900 mAh	
Battery Life (continuous operation)	> 12 Hours	8
Operating Temperature Range	-15°C to 60°C	
GPS Fix Rate Maximum	Once per second	
Wireless Transmission Period	Default is once per second, configurable via SNMP	8

Antenna Requirements

802.11 Antenna	Stubby 802.11 included, reverse SMA connection provided
GPS Antenna	Internal Antenna Provided

The specifications refer to the standard software builds of the NT-110ST. The performance and specification of the NT-110ST can be modified with the use of customized software builds.

Notes:

1. These are RMS values
2. Maximum Sensitivity -147 dBm
3. Simulator Test, continuous fix with all signals at specified power level.
4. Open sky, 24 hr field test. No sky-view obstructions.
Accuracy relative to ACTUAL surveyed position, not self-relative survey.
5. Limited by International Traffic in Arms Regulation (ITAR)
6. Defined by navigation integrity check
7. Limited by International Traffic in Arms Regulation (ITAR)
8. Continuous transmission, 1 fix per second @ 27°C

Disclaimer

In no event shall Janus Remote Communications, subsidiaries or The Connor-Winfield Corporation holding company be liable for any loss of profit or any other commercial or private damage, including but not limited to special, incidental, consequential or other damages, resulting from or in any way connected with the use of this software. Janus specifically disclaims any other warranties expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular use.

JANUS REMOTE
COMMUNICATIONS

Division of The Connor-Winfield Corporation
2111 Comprehensive Drive • Aurora, Illinois 60505
630.499.2121 • Fax: 630.851.5040

www.janus-rc.com

Janus Remote Communications Europe

Bay 143
Shannon Industrial Estate
Shannon, Co. Clare, Ireland
Phone: +353 61 475 666