

TR07B

Multi-functional Receiver
for Base Station

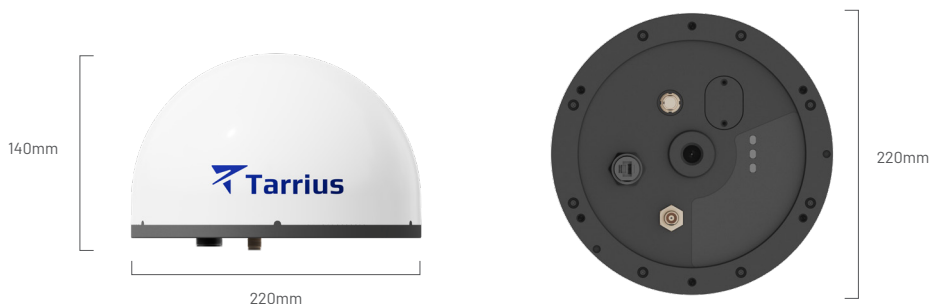


Precision you can build on.

Tarrius | TR07B

Multi-functional Receiver for Base Station

Overview



The TR07B is a high-performance, all-in-one GNSS receiver that supports full-constellation, multi-frequency tracking. Designed to function as a base station, it delivers precise GNSS corrections and positioning for a wide range of high-accuracy applications.

The TR07B supports flexible data transmission and remote management via cellular, Ethernet, and Wi-Fi interfaces. An intuitive web-based Interface allows for easy monitoring and configuration over local networks.

Engineered for harsh environments, the TR07B features a rugged IP67-rated enclosure, ensuring reliable operation and long-term durability in outdoor conditions. Its low power consumption and integrated compact design make it ideal for space- and energy-constrained deployments.

Application Scenarios

Robotic lawn mowers



Smart agriculture and precision farming



UAV ground control stations



Surveying and mapping



Autonomous vehicles and outdoor robotics



Highlights and Features



1 Modular design

Combines GNSS receiver, cellular/Wi-Fi communication and antenna systems. It has extension slots to support additional short-range communication for Sub-GHz.



2 High performance

Quad-band L1/L2/L5/E6 GNSS receiver supports 1040 channels, multi-constellation, which allows simultaneous reception of GPS, Galileo, BDS, GLONASS, QZSS and NavIC constellations.



3 High protection rating

P67 industrial-grade design with shock, impact, drop, lightning, and UV resistance.



4 Ultra-low power consumption

Typical power usage $\leq 2.5\text{W}$ with ultra-wide range voltage support from 9-36V.



5 Local and remote configuration

Supports local Wi-Fi WebUI and remote cloud configuration, simplified field installation.



Technical specifications

Technical specification			
GNSS positioning	Supported constellations and frequency bands	GPS	L1 C/A, L2C, L5
		GLONASS	L1, L2
		Galileo	E1, E5a, E5b, E6
		BDS	B1I, B1C, B2a, B2b, B3I
		QZSS	L1 C/A, L2C, L5
		NavIC	L5
	Channels	1040	
	Time to first fix	Cold Start: < 50 s	
Communication method	Wireless	Cellular LTE-FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM850/EGSM900/DCS1800/PCS1900	
		Wi-Fi (Range ≤10m, access point mode, Web user interface)	
		Sub-GHz (Range ≤500M)	
	Wired	Ethernet port(HTTPS, NTRIP, Web user interface)	
		RS-485, supporting Modbus protocol sensor access	
		RS-232, supporting NMEA 0183 and RTCM 3.x protocols output	
Electrical characteristics	Power input	DC: 9~36 V Typical value: 28 V	
	Typical power consumption	≤ 2.5 W	
Interfaces	LED indicator lights	3 (one red power light, one blue satellite light and one orange signal light)	
	SIM card slot	1 Nano SIM card slot	
	Connector	1 LEMO connector (power input, RS-232, RS-485) 1 RJ45 connector 1 TNC connector for short-range	
Cable	Length	Default 10 M	
Specifications	Dimensions	Φ220×149 mm	
	Net weight	2.1 kg	
Environmental adaptability	Operating temperature	-30 °C to +60 °C	
	Storage Temperature	-30 °C to +80 °C	
	Humidity	0~95 % RH	
	ESD protection	Contact discharge: ±8 kV, air discharge: ±15 kV	
	Protection rating	IP67	
Regulatory		CE, FCC, RoHS, REACH	
Power adapter		28V/1.3A	
Mounting bracket		Wall Mounting , Pole Mounting	