

## R71

R71 integrated BeiDou/GNSS receiver has built-in dual-antenna BeiDou/GNSS high-precision board, radio communication module, inertial navigation combined module, 4G module, etc. It is suitable for many application scenarios such as precision agriculture, construction machinery, and intelligent driving.



## Technical Features

- High precision and low power consumption, using Beidou, GPS, GLONASS, Galileo , QZSS and other systems to ensure positioning accuracy in a variety of complex environments;
- Compatible with a variety of Beidou/GNSS high-precision positioning and orientation boards, which can realize single Beidou solution;
- Built-in wireless communication module, various communication protocols, such as transparent transmission, TRIMTALK protocol, etc., are seamlessly compatible with GNSS radios of various manufacturers;
- Wide voltage power supply, voltage range 6 ~ 36 V DC, with positive and negative polarity reverse protection;
- Support remote system upgrade operation to reduce user maintenance costs;
- Integrated design, easy installation, standard IP67 waterproof and dustproof design ;
- Integrated inertial navigation module to ensure accuracy in all terrains;
- Adopt professional DEUTSCH communication interface.

# Technical Parameter

MODEL	R71			
Signal tracking	BDS	B1I, B2I, B3I		
	GPS	L1C/A, L2P (Y)/L2C, L5		
	GLONASS	L1, L2		
	Galileo	E1, E5a, E5b		
	QZSS	L1, L2, L5		
	Cold start time	< 30 s		
	Initialization time	< 5 s (typ.)		
	RTK initialization reliability	> 99.9 %		
	Recapture	< 1 s		
	Accuracy Index	Single point positioning	Plane	1. 5m
Elevation			2. 5m	
RTK Accuracy		Flat	$\pm(8 + 1.0 \times 10^{-6} \times D)$ mm Note 1	
		Elevation	$\pm(15 + 1.0 \times 10^{-6} \times D)$ mm	
Speed accuracy		0.03m/s		
G NSS heading accuracy		$(0.2/R)^\circ$ , R is the baseline distance, in meters		
G NSS roll or pitch accuracy		$(0.4/R)^\circ$ , R is the baseline distance in meters		
Gyro GNSS Fusion Heading Accuracy		0.5 °		
Angular velocity measurement range		$\pm 400$ °/s		
Acceleration range		$\pm 8g$		
Data update rate		1 ~ 100Hz		
Electrical parameters		Power consumption	$\leq 6.0W$	
		Supply voltage	6 to 36 V DC	
physical properties	Working temperature	-45 °C ~ +75 °C		
	Storage temperature	-55 °C ~ +85 °C		
	Size	195.9mm×84mm		
	Indicator light	1 power light, 1 differential signal light, 1 satellite light		
	Protection class	IP6 7		
	Shock and Vibration	2m drop resistance		
	Weight	1.05Kg		
	Data interface	Data output	NMEA-0183, binary code	
		Data refresh rate	1 ~ 20Hz optional	
		Baud rate	9600 ~ 406800	
Deutsch connector		including 1 power supply, 1 USB , 2 RS232 , 1 CAN		
Differential format		RTCM3.X		
Communication		Full Netcom 4G module, UHF radio communication module		
Data link antenna		1		
GNSS antenna interface	1			

Note: The above information is for reference only and may be varied at delivery. For the latest data, please contact us.

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