

Datasheet RK-306

GNSS Repeater, RK-306



Description

- Minimum re-radiation range of 30 meters
- The device transmits real-time GNSS signals from outdoor to indoor environments
- The system kit includes an external antenna, a precisely calibrated amplifier circuit, a helix re-radiating antenna, and a plug-in power supply
- The helix antenna can transmit signals to multiple receivers simultaneously
- Designed as plug-and-play hardware, the device can be installed either temporarily or permanently at any location
- RK-304 is used when only American GPS signals are required
- RK-306 is used when both GPS and Russian GLONASS signals are needed
- Whether in a building, garage, workshop, hangar, or other indoor space – the RK-306 is guaranteed to meet your requirements

Note: As of January 1, 2025, the RK-304 is no longer available..

Technical Data

Important Notice: The product is not automatically registered or approved with the German Federal Network Agency (BNA) upon delivery. Registration and approval must be carried out by the end customer by submitting the required information to BNA. The necessary documentation can be obtained from T&O Electronic Solutions. For use outside of Germany, please check the relevant regulations of your local telecommunications authority.

	RK-304 (for GPS)	RK-306 (for GPS and GLONASS)
Order Number:	RK-304	RK-306
Mechanical Data:		
Dimensions (Antenna)	114 x 74 (Ø x Height)	
Helix Radiator	37 x 35 x 71 (L x W x H mm)	
Power Supply	65 x 32 x 43 (L x W x H mm)	
Weight:		
Antenna	237 g	
Helix Receiver	48 g	
Power Supply	85 g	
Base	Stainless steel, glossy	
Color:		
Antenna	White	
Helix Receiver	Black	
Power Supply	Black	
Construction:	Polycarbonate housing, die-cast base, water-repellent rubber seal	
Environmental Conditions:		
Operating Temperature	-30° C ~ to +85° C	
Storage Temperature	-40° C ~ to +90° C	
Relative Humidity	95% non-condensing	
Waterproof Rating	IP65 standard	
Antenna Element:		
General Frequency	L1: 1575.42 +/- 1.023 MHz	GLONASS: 1602 +/- 8 MHz and L1: 1575.42 +/- 1.023 MHz
Gain	27 dB typical	
Bandwidth	2 MHz min	
Noise Figure	2.0 max	
Polarization	R.H.C.P.	
Cables and Connectors:		
Standard Connectors		
Antenna	TNC (M)	
Receiver	SMA (M)	
Cable	RG 58 A/U with 40 meters standard	
Electrical Specifications:		
Operating Voltage	100–240 V AC, power supply at 7.5 V DC	
Current Consumption	48 mA ± 5% @ 7.5 V DC	