



RX-9 WATERPROOF GPS TRACKER

APPLICATIONS :

- Vehicle tracking
- Motorcycle tracking
- Boat tracking
- Heavy machinery tracking

FEATURES :

- Supports 3G network
- IP-67 waterproof standard
- Wide range of power input voltage
- Store and resend up to 50,000 locations
- Pin point cell location
- AGPS support to improve GPS fixing time
- Driver ID (optional)
- Immobilizer (optional)
- Activated by motion/ignition
- Over the air (OTA) firmware/configuration upload
- Built-in antennas, compact size



RX-9 SPECIFICATIONS

Mechanical Characteristics

Dimension (L x W x H)	100 x 70 x 32.5 mm (±2 mm)
Weight	260 g (±10 g)
Material	Anti-UV Plastic housing
Waterproof	IP-67 waterproof standard

Environmental Characteristics

Operation Temperature	-20°C ~ +60°C
Storage Temperature	-40°C ~ +85°C

NOTE: Battery has individual operational and storage temperature limitations!

General Characteristics

GPIO	3 Inputs	Power
		Ignition detection
		Panic button (optional)
	2 Outputs	2 active low output (200mA max)
Antennas	Internal GPS & GSM antennas	
3-Axes Accelerometer	±16G (default)	

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Battery Characteristics

All specifications are at an ambient temperature of 25°C. Extreme operating temperatures can significantly impact specification values.

Backup Power	Li-Ion Cell Battery 3.7V / 1,150mAh	Transmitter	1 hour
		Normal	12 hours
		Standby	24 hours
Battery Temperature Limitation	Operation Temp.	-20°C ~ +60°C	
	Storage Temp.	-40°C ~ +85°C	

Electrical Characteristics

Input Voltage	9V _{dc} ~ 36V _{dc} (Current 2A, Ripple < 300mV _{p-p})				
Power Consumption	Operation Mode	9V _{dc}	12V _{dc}	24V _{dc}	36V _{dc}
	Transmitter	2 A	2 A	2 A	2 A
	Normal	150 mA	200 mA	250 mA	300 mA
	Standby	20 mA	30 mA	40 mA	50 mA

Accessories

In Box Accessory	CD (configuration tool / manuals)
	Configuration cable (sample only)
	Warranty seals
Optional Accessory	ISO-7637 Power surge protection box
	Panic Button
	Immobilizer
	I-Button (driver identification)
	Temperature Sensor

GPS SPECIFICATION

General Specifications

Receiver	GPS L1C/A
	SBAS L1C/A
	QZSS L1C/A
Channels	56 Channels

Time to First Fix⁽¹⁾

Cold Start	30 s
Warm Start	28 s
Hot Start	1 s
Aided Starts ⁽²⁾	< 5 s

Sensitivity⁽³⁾

Tracking Sensitivity	-161 dBm
Navigation Sensitivity	-161 dBm
Re-Acquisition	-160 dBm
Cold Start	-147 dBm
Warm Start	-148 dBm
Hot Start	-155 dBm

Horizontal Position Accuracy⁽⁴⁾

Autonomous	2.5 m
SBAS	2.0 m

Operation Limits⁽⁵⁾

Altitude	50,000 m (above sea level; maximum)
Velocity	500 m/s
Dynamics	≤ 4 g

⁽¹⁾ All satellite at -130 dBm

⁽²⁾ Dependent on aiding data connection speed and latency

⁽³⁾ Demonstrated with a good external LNA

⁽⁴⁾ CEP, 50%, 24 hours static, -130 dBm, > 6 SVs

⁽⁵⁾ Assuming Airborne < 4 g platform

⁽⁶⁾ 50% @ 30 m/s

UMTS/GSM SPECIFICATION

General Specifications	
Frequency Bands	UMTS Six Band : 800 / 850 / 900 / 1700 / 1900 / 2100 MHz
	GSM/GPRS/EDGE Quad Band : 850 / 900 / 1800 / 1900 MHz
Power Class	WCDMA/HSDPA/HSUPA – Class 3
	GSM/GPRS,GSM/E-GSM band – Class 4
	DCS/PCS band – Class 1
	EDGE – Class E2
Packet Switched (PS) Data Rate	HSUPA category 6, HSDPA category 8
	GPRS multi-slot class 12, Coding Scheme 1-4
	EDGE multi-slot class 12, Coding Scheme MCS1-9
Features	Embedded TCP/IP, UDP/IP, HTTP/FTP protocols
	Network Jamming Detection
	CellLocate & Hybrid Positioning
SIM Interface	Standard SIM interface
SMS	TEXT and PDU mode