

TC86 Rugged Asset Tracker

General Description

Pretrace Asset Tracker TC86 is the ultimate solution for seamless tracking and monitoring of your valuable assets. With multiple connectivity options—including Satellite, 4G, LTE Cat-M, NB-IoT, LoRaWAN, and Sigfox—this versatile tracker is available in three versions to suit a wide range of tracking requirements.

TC86-N (non-rechargeable): Delivers long-lasting performance for extended deployments.

TC86-Q (wireless rechargeable): Ideal for applications requiring frequent tracking updates.

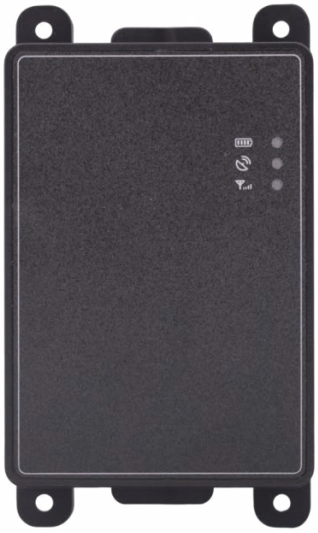
TC86-S (external power input): Supports real-time tracking and additional functionality. With three inputs/outputs, it offers the flexibility to customize and expand your tracking solution to meet specific requirements.

Target Application

- Container & Cold Chain Logistics
- Heavy Equipment & Machinery Monitoring
- Trailers, Pallets & Freight Assets
- Rental & Leased Equipment Management
- Cable Reel Monitoring & Cable Usage Statistics

Key Features:

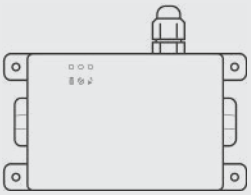
- Multi-network connectivity (depending on version): Satellite / 4G / LTE Cat-M / NB-IoT / LoRaWAN
- More than 10 years of battery life (non-rechargeable version)
- IP66-rated dust and water protection, suitable for outdoor applications
- Built-in 3-axis accelerometer for motion and tilt detection
- Built-in GNSS and network antennas; optional external antennas
- Backup memory for location records when reporting fails
- FOTA (Firmware Over-the-Air) support
- Optional temperature and humidity sensor for cold-chain applications
- Optional distance sensor for distance/level measurement
- Optional radar sensor for human motion detection



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TC86 Specification

Model	TC86-N	TC86-Q	TC86-S
Shape			
Bands/Regoins			
TC86-N4/Q4/S4	LTE: Global		
TX86-NN/QN/SN	Cat NB: Global		
TX86-NM/QM/SM	Cat M & Cat NB: Global		
TX86-NT/QT/ST	NTN (Satellite connectivity): L-Band(B255), S-Band(B256, B23)		
TX86-NL/QL/SL	LoRaWan: EU868 / US915 / AU915 / AS923 / KR920 / N865		
GNSS			
GNSS Systems	GPS, BDS/GLONASS, Galileo, QZSS		
Sensitivity	160 dBm		
Position Accuracy	< 5m		
TTFF	Cold Start: < 28 Sec, Hot Start: 2 Sec		
Optional Sensors			
Temperature&Humidity	Range: -45.0 ~ +85.0 ºC	Application: Environmental monitoring, Cold chain	
PT100 sensor	Range: -200.0 ~ +180.0 ºC	Application: Cryogenic refrigeration, Medical transport	
Distance Sensor	Range: 3~400 cm	Application: Tank/Containner/Trash Bin/Sewer monitoring	
Microwave Sensor	Range: 5~400 cm	Application: Human detection, Hunting trap	
Leakage Sensor		Application: Water/Liquid leakage detection (non-touching)	
Power			
Battery Capacity	3.6V 12000 mAh	3.7V 5200 mAh	3.7V 5200 mAh
Charger / Input Power	None	5V 500mA QI wireless charger	11.2-36V / 2A DC
Battery Life	>10 Years(1 Report / Day)	>20 Days(1 Report / 10 Minute)	No limitation @ external power
	>6 Years(2 Report / Day)	>115 Days(1 Report / Hour)	>110 Days(1 Report / Hour)
General			
Dimension	103*58*35 mm	103*58*35 mm	103*83*35 mm
Weight	180g	200g	215g
Operating Temperature	-40ºC ~ +85ºC	-40ºC ~ +85ºC	-40ºC ~ +85ºC
Working Current	30mA~100mA @3.6V	30mA~100mA @3.7V	10mA~35mA @12V
Sleeping Current	45μA	45μA	55μA
Protocol	TCP/UDP/MQTT	TCP/UDP/MQTT	TCP/UDP/MQTT
Log Saving	2000 pcs	2000 pcs	2000 pcs
SIM Type	Nano Sim	Nano Sim	Nano Sim
Interface	Digital input/Analog input/RS485	Digital input/Analog input/RS485	Digital input/Analog input/RS485

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Specifications are subject to change without notice.

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