



ORTEM | 25 YEARS OF
PIONEERING
INNOVATION



M12 (4G)

Vehicle Tracking Device

M12 products transmit information such as position information received from GPS and GLONASS satellites, vehicle speed, CAN-BUS data, ignition information, acceleration sensor, and position of the vehicle to the remote server using GSM/GPRS/2G/3G/4G infrastructures. It provides the opportunity to view and report all the information read about the vehicle via the Internet. With M12 products, point identification can be made to the vehicle and it has superior technological features such as an alarm notification when the designated points are crossed.

2G/3G/4G
Networks



GNSS



Digital
Input / Output



RFID



3 Configurable Sleep
Modes



Configuration via
SMS and TCP-IP



9-36 VDC
Operating Voltage



Module

Name	M12_ 4G
Technology	LTE Cat 1

GNSS

GNSS	Yes
Receiver	GPS/GLONASS/BeiDou/Galileo
Tracking Sensitivity	-157 dBm
Position Accuracy	<2.5 m
Hot Start	1.1 s with AGPS
Warm Start	3.7 s with AGPS
Cold Start	11.57 s with AGPS

Cellular

Technology	LTE Cat 1
2G bands	B3/B8
4G bands	B1/B3/B7/B8/B20/B28
Data Transfer	LTE-FDD, DC-HSPA+, WCDMA, EDGE, GPRS
Data Support	HTTP, HTTPS, MQTT, TCP-IP

Power

Input Voltage Range	9-36 V
Back Up Battery	300 mA (optional)

Physical Specification

Dimensions	76mm x 50mm x 25mm
Weight	53gr ± 2 gr.

Interface

Digital Inputs	1 (+Ignition, +2 Internal)
Negative Inputs	1
Digital Outputs	2
Analogo Inputs	1 (External)
GNSS Antenna	Internal
GSM Antenna	Internal
LED indication	3
SIM	1
Memory	4 MB

Environmental Conditions

Operating Temperature	-40 °C ~ +85 °C
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Features

External Sensors	RFID
Sleep Modes	3 configurable sleep modes
Configuration and firmware update	Auto-update feature for MCU and module firmware
SMS	Configuration via SMS
GPRS Commands	Configuration via GPRS
Time Synchronization	NTP server support
Ignition Detection	Yes

Certification & Approvals

Regulatory	CE- ECE R10
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