

Trace5

Datasheet

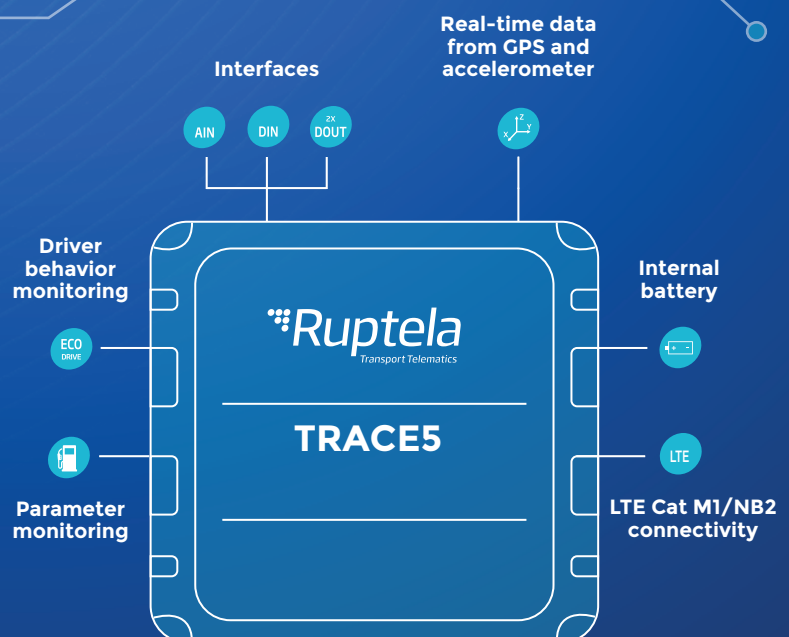


- **Trace5** is a compact GNSS-based Automatic Vehicle Location (AVL) tracker with all essential features for vehicle tracking and fleet management.

- This **GNSS tracker** uses **2G (GSM) and LTE Cat M1/NB2 (4G)** connectivity and a premium GPS module from **Ublox**.

Applications

- ✓ Track & Trace
- ✓ Safety & Security
- ✓ Green fleet
- ✓ Delivery
- ✓ Service fleets
- ✓ Vehicle leasing and financing
- ✓ Car rental



Detailed specifications

Environmental

Temperature

• Operating:	-22 to 140 °F	(-30 to +60 °C)
• Storage:	-40 to 149 °F	(-40 to +65 °C)
• Battery charging:	32 to 113 °F	(0 to +45 °C)
• Battery discharging:	-4 to 140 °F	(-20 to +60 °C)
• Battery storage:	-4 to 140 °F	(-20 to +60 °C)

Relative humidity

- 5% to 95% Non-condensing

Electrical

Power supply range

- 8 – 30 V DC

Internal battery

- LiPo 3.7 V 190 mAh

Protections

- Battery short circuit protection
- Reverse polarity protection
- Electrostatic discharge protection on USB
- Charging protection

Power consumption @ 12 V DC

Operating

(internal battery fully charged)

• Idle mode:	33 mA
• Active mode (peak):	76 mA
• Sleep mode (lowest):	5 mA

Connectivity

Cellular

• Modem:	Quectel BG95-M3
• Antenna:	Internal
• Bands (Cat M1):	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85
• Bands (Cat NB2):	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85
• Frequency bands (GSM):	850/900/1800/1900 MHz

GNSS

• Module:	U-blox EVA-M8M
• Antenna:	Internal
• Positioning systems:	GPS, GLONASS, Galileo
• Augmentation systems:	QZSS, SBAS (WAAS, GAGAN, EGNOS, MSAS)
• Aided start services:	AssistNow Online (A-GPS)
• Tracking sensitivity:	-154 to -164 dBm
• Reacquisition sensitivity:	-152 to -160 dBm
• Cold start duration:	< 30 s
• Aided start duration:	As low as 3 s

Interfaces

Digital inputs	<ul style="list-style-type: none">• Available inputs: 1• Voltage range: 0 - 30 V DC• Voltage threshold: 4 V DC• Voltage threshold when inverted: 250 mV DC
Analog inputs	<ul style="list-style-type: none">• Available inputs: 1• Voltage range: 0 - 30 V DC• Resolution: 12 bit
Digital outputs	<ul style="list-style-type: none">• Available outputs: 2• Maximum voltage: 32 V DC• Maximum current: 1 A
User interfaces	<ul style="list-style-type: none">• Mini USB interface• RG indication LED

Features

Internal storage	<ul style="list-style-type: none">• 8 MB
SIM card	<ul style="list-style-type: none">• Micro SIM
Device management	<ul style="list-style-type: none">• Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely
Accelerometer	<ul style="list-style-type: none">• Built-in 3-axis (auto-calibrating, impact detection, motion sensing, tilt detection, g-force up to 4 g)

Certifications and Ratings

Certifications	<ul style="list-style-type: none">• CE, E-Mark, CITC, PTCRB, FCC, IC, IP67 (TRACE5-LTM-IP67 only)
-----------------------	---

Physical Properties

Dimensions	<ul style="list-style-type: none">• TRACE5-LTM: 2.54 x 2.40 x 0.87" (65 x 61 x 22 mm)• TRACE5-LTM-IP67: 3.74 x 3.03 x 1.14" (95 x 77 x 29 mm)
Weight	<ul style="list-style-type: none">• TRACE5-LTM: 2.47 oz (70 g)• TRACE5-LTM-IP67: 6.52 oz (185 g)
Housing	<ul style="list-style-type: none">• Plastic (TRACE5-LTM), IP67 (TRACE5-LTM-IP67)

Ordering information

TRACE5-LTM	<ul style="list-style-type: none">• Trace5 with global LTE Cat M1/NB2 and 2G fallback network.
TRACE5-LTM-IP67	<ul style="list-style-type: none">• Trace5 with global LTE Cat M1/NB2 and 2G fallback network, IP67 housing.