

RM-300



RM-300: Vehicle Data Collection & Tracking Device Built-in GPS/GLONASS & 3G module

The go-anywhere solution for companies who need reliable mobile communication throughout their supply chain and want to future-proof their technology purchase with advanced communications options, modularity and ruggedness.



MOTIA - Mobile Telematics utopia

MOTIA is known as one of the most reliable on-board computer manufacturer in fleet management industry since 2003. We have developed and upgraded our products line up tailored to the needs of our clients who have provided excellent Fleet Management Services over the world.

MOTIA presents the most rugged, compact, reliable and high-value tracking device, "RM-300" designed for easy and reliable installation in Truck and Tractor with outdoor exposure.

MOTIA supports various OEM or technical customization services to our long term partners. We are trying to reflect all customer requirements from the embedded board modification level up to slight housing/ cable design changes.

RM-300 supports 6-band 3G/GSM/GPRS technology for communication by default and receives Glonass & GPS positioning data at multi mode with its superb internal antennas.

RM-300 Key Features:

Water resistant IP67 housing

Durable and rugged casing to withstand harsh environments

Easy installation

Sealed connectors ensure reliable connectivity

Various kinds of communication ports

Built-in 3-axis accelerometer

Ultra low power sleep mode

Highly sensitive Glonass/ GPS receiver for positioning

3G Modem for high data bandwidth capability and fast data transfer rate

Superior internal antennas for both GSM/GPRS and GPS/Glonass

Over the air update capability for configuration and firmware

1700 mAh Li-Polymer rechargeable battery

CPU & Memory

- :: CPU STM32F205ZGT7(ST)
 - Including * Basic Flash Memory 1MB and *RAM 128K
- :: Flash: 4MB or 8MB or 64MB (optional)
- :: SRAM: 512K or 2MB (optional)

Power

- :: Input Voltage 12 VDC (8 - 36V)
- :: *1700 mAh, Li-Polymer built-in back-up battery (optional)
 - charging/low voltage check-up available by SW controller

Interface Port

- :: Digital Input : 2 ports (0-30V)
- :: Digital Output : 2 ports (Voltage level fixed)
- :: Analog input : 1ch, 12bit (Voltage range fixed)
- :: Serial Port (RS232) : 1 COM Port
- :: Dallas One-Wire
- :: Connector : 12 pins, male

CAN

- :: 2.0A & 2.0B Active

Environment

- :: Operating Temperature
 - 30 ~ +85°C (no battery)
 - 20 ~ +85°C (with battery)

Certifications

- :: FCC, CE, E, IP67

GPS receiver

- :: Receiver Type : SiRFstarIV, M10478-A3, 66 channels
- :: Time-To-First-Fix
 - Hot start < 1sec
 - Cold start < 35sec
- :: Positioning precision <5m
- :: Sensitivity -163 dBm
- :: Built-in antenna

GSM/GPRS modem

- :: u-blox Lisa-U200,
 - 6-band 800/850/900/1800/1900/2100 MHz
- :: GPRS Connectivity class 8+10
- :: Transmit power 2W (for 900 MHz)
- :: Sensitivity -106 dBm
- :: Built-in antenna

Sensor

- :: Built-in 3-axis accelerometer ($\pm 2/8g$)
- :: Analog Device : ANALOG DEVICE ADXL345
- :: Tremble detector

Sealing (Waterproof)

- :: IP67

Software Features

- :: Over-the-air configuration parameters,
 - PEG rules, and firmware
- :: SDK for embedding custom communication protocols
 - application logic and I/O control into firmware

Physical Characteristics

- :: Dimensions (mm) : 118 x 133 x 36 mm



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