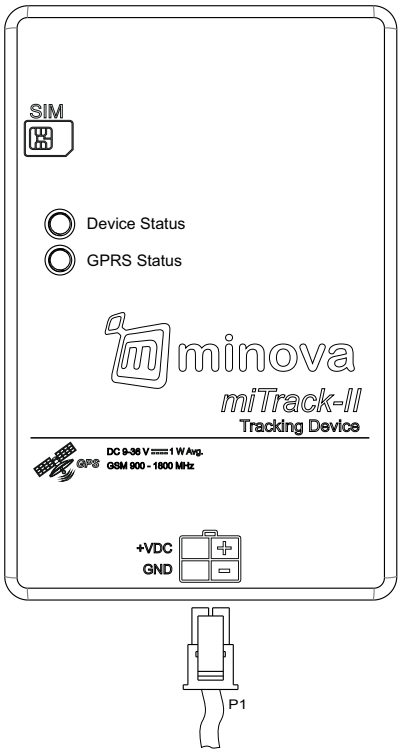
miTrack-II Basic Tracking Device



Applications

Vehicle tracking and fleet management projects. Tracking systems with G-sensor and battery support.

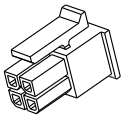
Connectors

Device has automotive grade MicroFit type locked connector on the bottom side for power and I/O pins. Mating connector with cable is included.

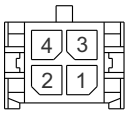
On the side, push-push type SIM card connector is accessible.

Receptacle Part number :

Molex Micro-Fit 3.0
Receptacle Dual Row 4 Circ.
Prt.Nr: 0430250400



Connector Pinouts



P1 Connector

1 GND
2 Ignition Sense
3 +9...36V DC
4 Relay Output

General Information

miTrack-II series GSM/GPS tracking devices are cost-effective, compact sized and functional units for vehicle tracking applications.

Device is designed with, Telit® GSM ve GPS modules. Connection handling is reinforced with smarter management stack to keep devices connected under any circumstances.

Unit has internal GSM and GPS antennas to make the installation process easier.

miTrack-II has, high performance Cortex M3 CPU and 8MBit (1MBytes) non-volatile memory. G-sensor is an optional ad-on providing 3-axial acceleration and inclination (when stationary) information to monitor driving behaviours.

Device has 2 I/O pins, the input pin is to sense the ignition and output pin for engine blocking applications. Both pins are protected for automotive electrical surges and ESD.

miTrack devices has built-in offline log space to store the geolocation information when a communication failure happens. Stored information is transfered to the server immediately when connection is re-eshablished.

Device communicates with server via TCP/IP persistent socket connection. Geolocation, alarms and parameter packages are conveyed through the socket connection bidirectionaly. In case of any server or socket connection failure, new connection paremeters and any other settings can be send to device via SMS text messages.

Device firmware can be updated over the air without blocking the device operation. Device, downloads new firmware and switches to new version upon command or immediately.

All miTrack family devices share same communication protocol named traceCom. Protocol documentation is available upon request.

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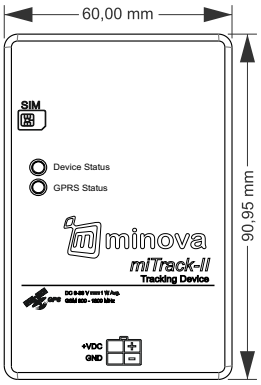
Technical Specs.

GSM	
Module	Telit GL865 V3 (900-1800 Mhz)
GPRS	Class 10 Mobile Station Class B
GSM Antenna	Internal
Output Power	Class 4 (2W) @900 MHz Class 1 (1W) @1800 MHz
Communication	TCP/IP, UDP, SMTP, ICMP, FTP, SMS
Receiver	-108 dBm (typ.) @900 MHz -107 dBm (typ.) @1800 MHz
GPS	
Module	Telit JF2, SIRF IV 48 Ch.
Receiver Antenna	Internal Passive Receiver Antenna and LNA
Hot Start	3 s.
Cold Start	<35 s.
Sensitivity	Acquisition -147 dBm Navigation -160 dBm Tracking -163 dBm
LBS	Positioning using cell towers location
CPU	Cortex M3 Series 32Bits High Performance CPU, 50MIPS
I/O	
	1 Ignition Input (40V max.) 1 Engine Blocking Relay Output (40V max, 500 mA)
Protocol	Minova traceCom GSA GateWay Software (Windows & Linux)
Update Over the Air	
Firmware	FTP update server or GPRS FOTA (Firmware Over The Air)
Parametrers	GPRS Socket and SMS
Offline Mod Storage	Internal Flash, 8Mbit (1 Mbayt)
LEDs	2 LEDs, GSM and Device Status
Battery	900 mAH Li-Ion
Power Consumption	8-36 V DC, 1 Watt Avg.
Ağırlık	74 gr.
Dimensions	90mm x 60mm x 22mm
Envirainmental Conditions	-20, +80 C, 90% RH

Mechanical



Not : All dimensions are in mm.