ENAiKOON inmarsat-600

Inmarsat modem for worldwide satellite communication

ENAiKOON inmarsat-600 enables communication between trackables and the back-end system through satellite communication.

ENAiKOON inmarsat-600 was designed specifically for fleet management companies that operate vehicles, construction machines, ships or other mobile objects where there is no GSM coverage and it is imperative to have a reliable tracking solution.

ENAiKOON inmarsat-600 is fully compatible to the Inmarsat IsatData Pro satellite service. The IsatData Pro service allows a cost effective and bidirectional communication between the back office software and any kind of mobile object.

Due to the IsatData Pro service the ENAiKOON inmarsat-600 provides a reliable internet connection to transmit all relevant data to ENAiKOON inViu pro.

Standard Features

GPS - precise information about the current location

GPRS - fully supported, cost-effective internet access

Inmarsat - economical surveillance and location monitoring in places where there are no cellular networks

Complementary ENAiKOON applications:

- **inViu pro**
  internet telematics portal for professionals with comprehensive trackable data reporting capabilities: location, route, monitoring and alarming of fuel theft / consumption and thresholds, CAN data analysis, and reports with all enabled smartphones
- **inViu web**
  GPS location cost-effective entry level solution: realtime display of positions on an OpenStreetMap© map, geofence monitoring and alerting, etc.
- **inViu routes**
  software for Android smartphones: allows to see the current location, driven routes and many more information of your ENAiKOON inmarsat-600 device in real time
- **ENAiKOON fuel-tracker**
  up to four 1-Wire ultrasonic sensors for monitoring the fuel level; allows detecting fuel theft in real time even if the engine of the vehicle is off
- **ENAiKOON temp-sensor**
  up to four 1-Wire temperature sensors for monitoring the temperature of goods, of the engine, the ambient temperature and many more
- **ENAiKOON limit-checker**
  software designed to help you set threshold values and customised alerts for an optimised vehicle and equipment maintenance program
- **staff-tracker**
  helps you with the management of your mobile employees by facilitating their performance reviews while giving employers the ability to process the data collected for payroll and accounting purposes

Applications

The GPS satellite navigation system covers all areas of the world.

GSM mobile phone technology has advanced significantly and is available worldwide, in areas with a dense population. However, thinly populated areas are often not covered by a GSM network. In these areas, vehicles cannot communicate with their dispatcher using GSM.

Amongst those areas are deserts, rain forests, the ocean, Greenland, recent war zones like Iraq, a large part of India, and in Southeast Asia, where regions have been destroyed by natural disasters.

Companies that need to track vehicles, construction machines, containers, ships, or other trackables all over the world require technology that works globally, such as the Inmarsat satellite system.

Expensive satellite communication is a thing of the past. With the new ENAiKOON inmarsat-600 device, your communication costs will be significantly reduced.

The hardware today is available for under € 750 per vehicle and the expenditure of a data transmission per message, containing the position and other information about the trackable (e.g. temperature of the goods, voltage of the car battery, status of the digital inputs, security information, etc.) are prompt and cost-efficient. The monthly flat rate starts at € 9.90.

The ENAiKOON inmarsat-600 infrastructure is extremely reliable, as it was originally designed as an obligatory maritime alarming system on commercial ships all over the world. For customers, this means that position reports, alarms, and other messages arrive reliably to their back-end system.

How it works

ENAiKOON inmarsat-600 can be installed on any stationary or trackable object. The only thing that needs to be secured, is the power supply and a direct view to one of the eleven Inmarsat satellites, which are located at a height of approximately 36,000 km (22,369 m)

The ENAiKOON inmarsat-600 unit sends position and status reports in configurable time frames or on request by one of the satellites in view. This, in turn, sends the information to the Inmarsat ground station, located in Burum, Netherlands. The ground station then sends the data directly to the ENAiKOON M2M-commserver.

Any application that is ENAiKOON M2M-commserver compatible can load the data from the ENAiKOON M2M-commserver for further use.

Data transmission works similarly the other way around. The ENAiKOON M2M-commserver-compatible application sends data to the ENAiKOON M2M-commserver. The ENAiKOON M2M-commserver, then forwards the data by e-mail to the ground station in Burum, where the data is uploaded to the satellite and then downloaded to the ENAiKOON inmarsat-600 device.

Full cross-transmission time, to and from, is generally processed within four minutes. ENAiKOON inmarsat-600 uses the new IsatData service for data transmission. The volume of data per transmission is large enough to send and receive various information like temperature, pressure, state of sensors, speed, directions, heights, etc.

In addition, the box can be configured in a way, that messages will be sent by the unit, if certain events take place (i.e. if a vehicle leaves its boundaries, reaches a certain speed, hits a certain height, or detects a certain state). Text messages can be sent in both directions.

Various accessories for ENAiKOON inmarsat-600 are constantly being developed and available, such as unit mounts, power supply cables, additional interfaces, and processing power.

When other telematics suppliers refer to satellite-based onboard units, they typically only refer to the Global Positioning System GPS, which allows receiving information from satellites, that can be used to calculate the position of a mobile object.

They typically do not refer to the two-way data transmission through satellites, which is used to transmit positioning and other information to and from the mobile object through satellites.
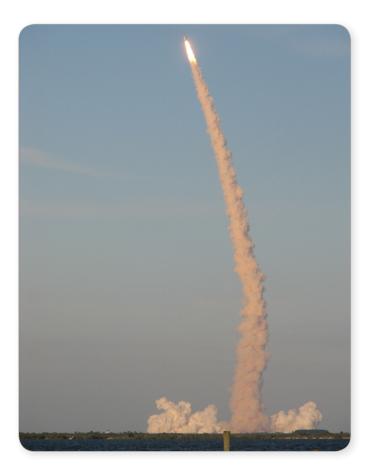
Inmarsat provides these two-way satellite data transmission infrastructures and with ENAiKOON inmarsat-600 you can be assured you will receive the most cost-effective, reliable, and secure satellite communication system available today.

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Sample applications

Surveillance, remote control, and positioning

- airships, ambulances, aeroplanes, animals
- balloons, buoys, boats
- construction equipment, cars, containers
- dangerous freight
- employee vehicles, emergency transportations
- factories, ferries, fishing fleets
- generators
- hot air balloons, halls, houses, helicopters
- industrial plants
- lighthouses, life rafts
- machines, metering stations, motors
- pipelines, piping, police vehicles
- refrigerators, rescue buoys
- ships
- trains, trucks
- valuable transports
- wagons, wind energy plants, weather stations
- yachts

Features

- send and receive data through the Inmarsat-600 service to and from anywhere in the world
- ideal for the positioning of trackables like cars, trucks, construction equipment, etc. for fleet management and SCADA applications
- 4 analog or digital inputs/outputs
- optional 1-Wire via RS-232 adapter
- today's smallest two-way Inmarsat terminal worldwide: 126x126 mm (4.9x4.9 in), H 49 mm (1.93 in)
- low power consumption; ideal for battery-powered applications
- integrated GPS / GLONASS receiver with sensitivity of -148 dBm
- powerful scripting language
- wide operating temperature range: -40 °C to +85 °C (-40 °F to +185 °F)
- power supply 9 V to 32 V DC
- maintenance free; exceptional life cycle
- water resistant
- configurable multi-messaging:
  - vehicle static or in transit
  - speed is over / under the reference value
  - change of power supply
  - mobile object enters / leaves a predefined area
  - temperature is higher / lower than the reference value
  - position and status reports after a configurable time frame or instantly
  - change of the status of a digital input or output
  - height is over / under the reference value
- sending of various pre-configured text messages
- multiple configurable power saving modes
- easy to install

Several of these functions can be combined or one action can be initiated by another. The possibilities are endless and are not limited to the features listed.

Products and prices

Product	Part no.	Product description	Price
ENAiKOON inmarsat-600	INM-15-05	ENAiKOON inmarsat-600 unit with power cable and mounting accessories	€ 729
ENAiKOON device setup	M2M-03-01	Device setup ● device configuration according to customer needs ● production of harness according to customer needs ● device configuration ● registration with the ENAiKOON M2M-commserver ● registration with the Inmarsat server ● registration with inViu pro / web ● full functional test of the device ● full functional test with inViu pro / web (must be ordered along with the device)	€ 99
ENAiKOON inmarsat-600 magnetic holder	INM-04-03	ENAiKOON inmarsat-600 4 magnetic feet for easy installation of the unit on steel each foot holds 12 kilograms (26.45 lb)	€ 98
ENAiKOON inmarsat device setup	INM-04-07	Activation and initial configuration of the unit in the Inmarsat network	€ 149
ENAiKOON inmarsat airtime 500	INM-15-01	Inmarsat airtime data package up to 500 byte approximately 25 position transmissions monthly contract duration 24 month	€ 9.90
ENAiKOON inmarsat airtime 10000	INM-15-02	Inmarsat airtime data package up to 10,000 byte approximately 500 position transmissions monthly contract duration 24 month	€ 19.90
ENAiKOON inmarsat airtime 25000	INM-15-03	Inmarsat airtime data package up to 25,000 byte approximately 1,250 position transmissions monthly contract duration 24 month	€ 29.90
ENAiKOON inmarsat airtime 100000	INM-15-04	Inmarsat airtime data package up to 100,000 byte approximately 5,000 position transmission monthly contract duration 24 month	€ 79.90

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Optional hardware

Product	Part no.	Product description	Price
ENAiKOON driver-id reader	ZUB-05-02	ENAiKOON driver-id reader with 1 sensor; including 2 ENAiKOON iButton, ENAiKOON buzzer, and a 2 m (6.5 ft) cable	€ 79.90
ENAiKOON fuel-level electronic unit	EFT-15-01	ENAiKOON fuel-level electronic unit ● for measuring the fuel tank contents together with ENAiKOON fuel-level ultrasonic sensor ● including cable The ENAiKOON fuel-level ultrasonic sensor is required for use of the electronic unit. Up to 4 electronic units can be connected. If a truck has multiple tanks then for each tank one electronic unit and one sensor is required.	€ 179
ENAiKOON fuel-level sensor ultrasonic	EFT-15-03 EFT-15-02	ENAiKOON fuel-level sensor ultrasonic ● ultrasonic sensor for measuring the fuel tank contents ● suitable for aluminium and iron tanks ● including 6 meter extension cable The ENAiKOON fuel-level electronic unit is required for use of the sensor. ENAiKOON fuel-level sensor ultrasonic ALU ENAiKOON fuel-level sensor ultrasonic IRON	€ 120 € 120
ENAiKOON temp-sensor-03	ZUB-05-03 ZUB-10-05	1-Wire temperature sensor with a cable for mounting on a monitoring device cable length: 5 m (16 ft) cable length: 12 m (39 ft) (a special cable must be ordered along with ENAiKOON inmarsat-600 for the attachment of one or more temperature sensors)	€ 79 € 89