





# GPS/GSM Tracking, Monitoring & Messaging with the MAGNATEC MFU-12

#### The Possibilities:

- Monitoring of vehicles, construction machinery and container/cargo with GPS/GSM
- ♦ Tracking of single vehicles or vehicle
- Tracking or calling in settable time intervals
- Displaying of current Vehicle positions in digital maps on a PC in your operation center
- Storing of all transmitted vehicle positions/messages in a common database
- Transmitting of orders, messages, surveying and telemetric data between mobile and base station

#### The Solution:

#### **Mobile Part**

- ♦ GPS-GSM-Unit with digital and analog Input and Output channels
- ♦ Flat (no rod) GPS-GSM PCB-antenna for consealed or hidden installation
- optional vehicle approved SMS-Display for receiving and confirming SMS-Messages
- optionally Tripdata recording system (CarOrganizer) for later offline evaluation and fleet management
- optionally voice call possibility

## **Base Station/Operation Center**

- ♦ (SQL-) Database system
- Software application Roadstar-Pro and Roadstar-GIS (Geographical Information System)
- SMS-Server and GSM Modem for data transmission in the GSM 900 Network

## **Technology:**

#### Future orientated Software (SQL-compatible database structure in connection with

- GIS-Modul Roadstar-GIS (allows access to digital maps as well as on satellite pictures)
- ♦ latest GSM-Modem technology for data and voice
- GPS-Tracking and DGPS-Postprocessing
- GPS-online and offline Tracking with the latest state of the art data storing (SSFDC-SmartMediaCard with Data recorder (max. 125,000 data strings=12,500 km)

## The Applications:

- Fleet operator logistical services and road
- Freight and cargoliner companies
- Inner work traffic in large industrial plants and on airport fields
- Surveying of dumping activities (industrial waste)
- Service and maintenance companies
- Security applications

#### The Effects:

## Decreasing of costs by:

- ♦ Central data administration
- Always the current overview about every vehicle status
- Possibility of online fleet controlling
- Documentation of all vehicle activities for internal and external proof.

# System Requirements for the Use of Magnatec-GPS-GSM Components

## **Stationary Applications**

Surveying of general function or process data of stationary technical plants or devices like power plants, vending machines, escalators, containments or unoccupied (ware-) houses for theft protection.

## **Operation Center**

stationary based (external)

- PC
- GSM-Modem
- GSM-roof/wall antenna
- ROADSTAR MFU-Configuration software
- ROADSTAR SMS-Datatransfer software
- MFU-12 (GSM)
- GSM-object antenna

## **Mobile Applications**

Surveying of mobile technical devices (Vehicles, trains, wagons, mobile containers, construction machinery. Possibility of online tracking via GSM-Network

## **Operation Center**

- PC
- GSM-Modem (SIM-Card needed)
- GSM-roof or wall antenna
- **ROADSTAR** MFU-Configuration software
- ROADSTAR SMS-Datatransfer software
- **Roadstar**-GIS-Software for online tracking of moving objects at digital maps on your PC

#### mobile Part

- MFU-12 (GPS-GSM) (SIM-Card needed)
- GPS-GSM-Object antenna