

# GreenGuard

## Fleet Management System

### SYSTEM REQUIREMENTS

Fleet integration	Project specific integration of fleet assets according to customer requirements using GreenGuard communication unit, ComAp controller (optional), interfacing panel and backup battery (optional)
Data communication	GSM/GPRS (requires SIM card per asset) or LAN/Internet, optional satellite terminal
Server operating system	Windows Server
Internet	Fixed IP address or DynDNS service
Extranet access	Internet access to GreenGuard through HTTPS/Security Token (optional)
Intranet access	Intranet-access to GreenGuard using HTTP
Operator terminal	PC with web browser

### Features

#### Monitoring and control for industrial applications

- status supervision
- history recording
- configurable trend charts
- SMS/Email operator and service staff alerting
- monitor fuel consumption
- supervise fuel tank pilferage
- extensive reporting

#### Managing rent out equipment

- contract handling
- equipment scheduling
- customer login with access to the rented equipment
- SMS/Email customer alerting

#### GPS location

- overview of equipment location and status
- supervision of GPS position
- geo-fencing and remote lockout
- track object movements

#### Integrated document management

- organize manuals, schematic drawings and operating instructions
- interlink documents to all equipment of the same type
- interlink documents to individual stations

#### Maintenance plan

- service counter indication
- schedule maintenance events with the integrated rule engine
- combine events with working instructions (supports quality management such as ISO 9000)

#### Maintenance log

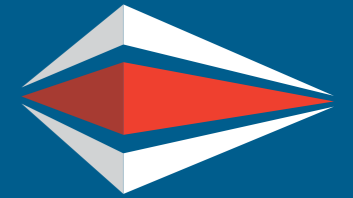
- integrated logbook
- register reminder notes or issues to follow up
- record the used spare parts
- trace the spare part usage e.g. on which systems was a certain part installed



Bützbergstrasse 2  
4912 Aarwangen - Switzerland  
T: +41-(0)62 923 79 93  
F: +41-(0)62 923 79 83  
E: info@42technology.ch  
W: www.42technology.ch

PARTNER

Features and specification are subject to change without prior notice



42TECHNOLOGY

# GreenGuard

## Fleet Management System



## GreenGuard (Fleet Management)

GreenGuard is a web based industrial fleet management system for various applications among engine driven installations such as CHP-plants, gen-sets, pumps, compressors, cranes and construction equipment as well as mobile phone cell sites.

GreenGuard allows you to remotely control, monitor and protect your fleet. The integrated maintenance and reporting functions enable an excellent information base to improve the overall performance of your equipment.

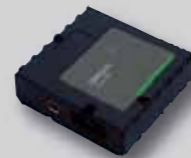
GreenGuard for mobile and stationary applications features:

- Remote supervision via GSM/GPRS or LAN
- Alert function via SMS and email to various addressees
- GPS position location and theft protection (geo fencing)
- Powerful reports and service forecasts
- Maintenance and service logs
- Rent-out contract handling with customer login and alerting

By using GreenGuard fleet management system you can profit from the following benefit:

- Maintenance forecast lowers service costs
- Condition monitoring for greater up time
- Improved service engineer availability
- Fuel consumption monitoring and control
- Fast on site intervention and staff allocation
- Automated service engineer scheduling
- Spare parts forecasting and dispatching
- Centralized service documentation
- Theft protection and unit allocation

## Field of application



### Basic Asset Localisation

- GPS-position
- Status supervision (binary in-/outputs)
- Geo-fencing
- Remote lockout function

### Applications

Entry level system for mobile equipment such as construction machinery, mining, pumps, cars, trucks,... where localization and remote lockout functionality is sufficient.



### Control, Protection and Supervision

- CAN J1939 supports more than 40 engine types
- Binary and analogue in- and outputs
- Fuel consumption measurement
- Hydraulic control
- Available as data logger

### Applications

Off road machinery with electronic engines such as trains, vessels, piste bashers, wood processors... Available as passive data logger with black box functionality or with additional control functions and PLC.



### Power Generation

- Protocol gateway to ComAp controllers
- GSM/GPRS or LAN connection
- GPS-position

### Applications

Stationary and mobile supervision and control of engine applications.



### On-Road Vehicles

- CAN-FMS interface
- Binary and analogue in- and outputs
- Driver identification
- Fuel consumption

### Applications

On road vehicles such as car, truck and bus.

## GreenGuard Software Comparison

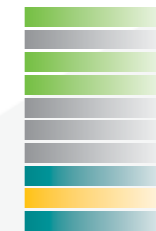
Full support  
Limited functionality  
Customer specific add on  
Not supported



### GreenGuard-Lite

*Entry level fleet management*

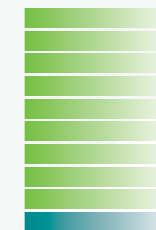
Intranet service  
Internet service  
Monitoring and control  
Trends and charts  
Contract management  
Plant documentation  
Maintenance plan  
SMS/email alerting  
Large fleet size  
Expandable to customer requirements



### GreenGuard

*Fully fledged fleet management*

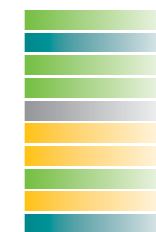
Intranet service  
Internet service  
Monitoring and control  
Trends and charts  
Contract management  
Plant documentation  
Maintenance plan  
SMS/email alerting  
Large fleet size  
Expandable to customer requirements



### GreenGuard SL (slope)

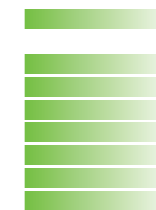
*Specialized for the management of piste bashers in ski resorts*

Intranet service  
Internet service  
Monitoring and control  
Trends and charts  
Contract management  
Plant documentation  
Maintenance plan  
SMS/email alerting  
Large fleet size  
Expandable to customer requirements



### Specific functionality

Fuel metering through CAN or with flow meter  
Internet service  
Position and route tracking  
RPM supervision  
Black-box data recording  
Ski-slope work billing  
Current status of slope preparation work  
Driver identification



### Vehicle Tracker System

*Specialized for on road vehicle tracking,*

Intranet service  
Internet service  
Route tracking  
Fuel monitoring  
CAN FMS data\*  
Improve and train driving skills of your staff  
Geo fencing  
Detect unauthorized use of the vehicles  
SMS alerting  
Large fleet size  
Expandable to customer requirements  
Rent or buy software



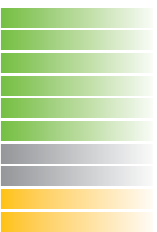
## GreenGuard Communication Unit Comparison

Full support  
Limited functionality  
Function not supported



### GM2220/4440 GPRS/GPS unit

GreenGuard integration  
Vehicle tracking integration  
Binary input/output  
Analogue input (4440 only)  
CAN-bus (4440 only)  
Fuel counting (4440 only)  
Engine protection  
Engine control  
Rugged  
Tropicalized



### GM862-Lite GPRS/GPS unit

GreenGuard integration  
Binary input/output  
Analogue input  
CAN-bus  
Fuel counting  
Engine protection  
Engine control  
Rugged  
Tropicalized



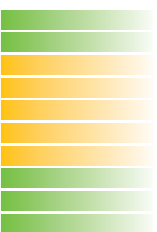
### GM800 LAN unit

GreenGuard integration  
Binary input/output  
Analogue input  
CAN-bus  
Fuel counting  
Engine protection  
Engine control  
Rugged  
Tropicalized



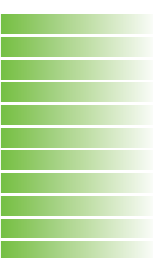
### GM862 8/4 GPRS/GPS unit

GreenGuard integration  
Binary inputs/outputs  
Analogue inputs/outputs  
CAN-bus  
Fuel counting  
Engine protection  
Engine control  
Run hour counter  
Rugged  
Tropicalized



### InteliLog Mobile / InteliMobile with internal GPRS/GPS

GreenGuard integration  
Binary input/output  
Analogue input  
CAN-bus  
Fuel counting  
Engine protection  
Engine control  
Run hour counter  
Rugged  
Tropicalized  
Available as pure data logger



### InteliLog data logger

GreenGuard integration  
Vehicle tracking integration  
Binary input/output  
Analogue input  
CAN-bus  
Fuel counting  
Engine protection  
Engine control  
Rugged  
Tropicalized

