

Attention Vehicle Owners Transporters Bus Operators Corporates

Track your vehicles LIVE online from anywhere

with

STRADA

Vehicle fitted device
Satellite + broadband GPRS
Live tracking & mapping
Global coverage

Device ready for upcoming mandatory requirements for vehicles

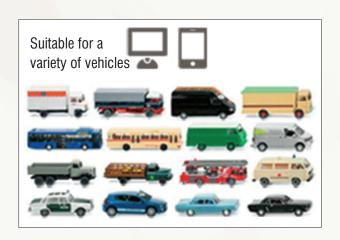
Fully OBD II compliant

Easily fitted at authorized dealer garages



Design subject to change without notice

Online tracking on browsers and smartphones
Instant live customized alerts
Reports and history features
Economical price, Low operating cost
Easy upgrade modules



$\mathsf{STRADA}^{\scriptscriptstyle{\mathsf{M}}}$

Essen's STRADA™ is a vehicle tracking platform that enables live tracking and mapping of vehicles on the move from a remote location. Strada's tracking service provides continuous location updates from a vehicle-fitted device, to a Server accessible online by the user.

Strada™ consists of an advanced GPS/GSM/GPRS vehicle tracking device that enables comprehensive management of moveable assets. It can support 3 different sensors simultaneously, allowing it to be utilized for advanced application requirements.

The hardware device can be easily fitted at any of our authorized dealer garages at various locations. The device is fully compliant with existing OBD II protocols and is future-ready for upcoming mandatory vehicle requirements. It communicates with the online Server through satellite via broadband GPRS and can be tracked remotely by the user from anywhere across the globe.

Mode:

On-board device fitted inside vehicle Live remote tracking of vehicle through satellite

Strada™ enables effective fleet management of multiple vehicles through live monitoring of vehicle location, route tracking, transit mapping and trip data. It improves efficiency, scheduling and timeliness of vehicles and is highly suitable for cargo fleet owners, couriers, bus operators, security vehicles, emergency vehicles, corporate users and public transport. Individual vehicle owners can also benefit from all the above features and keep constant track of their vehicle usage and whereabouts.

The Strada™ device is available at a costeffective price and upgrade enabled. Online tracking is done through user login on browsers and smartphone applications at an economical subscription fee.

$\mathsf{STRADA}^{\scriptscriptstyle{\mathsf{M}}}$

Vehicle Tracking

- · Individual vehicle tracking
- Fleet tracking and summary
- · Live vehicle mapping and transit updates
- Vehicle location, route tracking and trip data
- · Alerts for halts, delays and geo-fencing
- · Reports and history features
- Supports 3 sensors for optional accessories

Remote live tracking and mapping of vehicles online



Advantages of Strada™ vehicle tracking:

On-board device enables live tracking of vehicle on the move

Enables tracking and mapping online from a remote location

Eliminates need for portal tracking of vehicle at various scattered locations across journey

Each vehicle can be tracked live online at an economical subscription fee

Fleet management of multiple vehicles

Advanced applications:

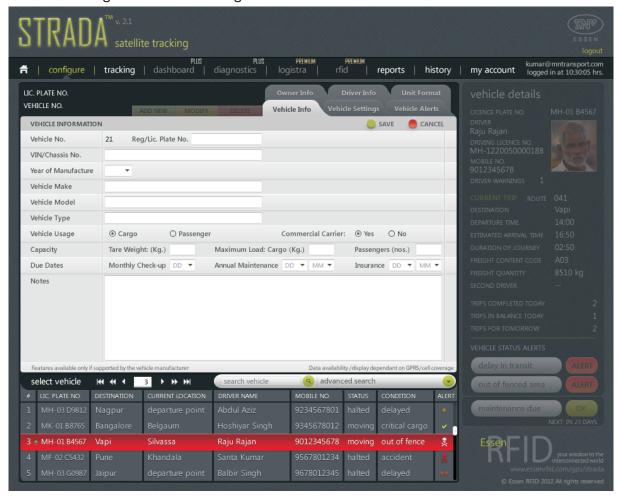
Logistics fleet monitoring and management Bus fleet safety monitoring and management Taxi fleet dispatching and management Refrigeration fleet temperature monitoring

Each on-board device includes a pre-paid SIM card supplied by the customer, which enables connection. The online tracking fee is inclusive of SIM charges.

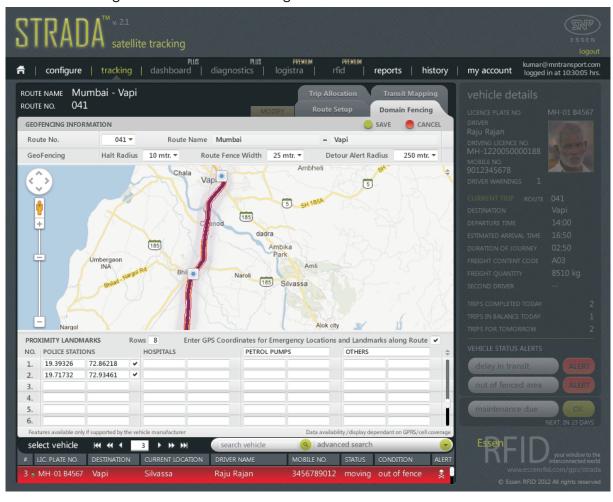
Strada™ Main Screen



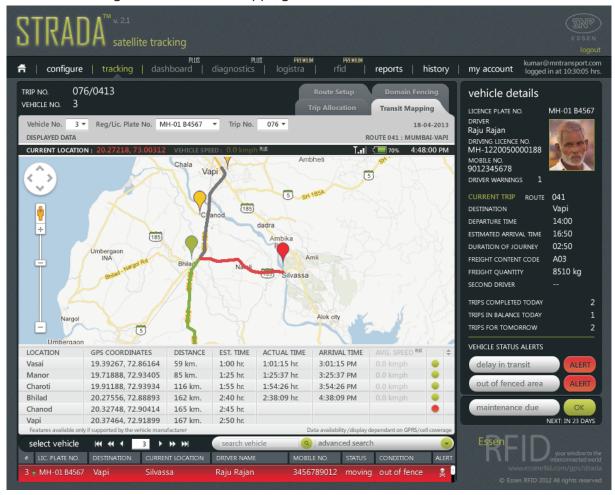
Strada™ Configure Screen: Adding Vehicles



Strada™ Tracking Screen: Domain Fencing



Strada™ Tracking Screen: Transit Mapping



User Customization and Themes

Strada $^{\text{TM}}$ provides a significant degree of customization that enables the vehicle owner to configure his own user-defined settings and alerts.

Strada[™] can also be displayed on screen in additional visual themes that appeal to the user.

Subscription Options

Strada[™] offers a choice in subscription options based on the number of vehicles to be covered as well as discounts for annual payment of fees.

Refer to our website for the detailed subscription chart.

Installation and Activation

For installation and activation of the Strada™ device on each vehicle, please enter the following in your browser:

http://www.essenrfid.com/gps/strada/installation

and select a dealer garage servicing your vehicle model, at a location convenient to you.

Device activation is securely done via scratch card entry of ID no. into the vehicle owner's cellphone.



Chrome Theme



Gold Theme



Copperwood Theme

STRADA™ - **Specifications and Functions**

GSM	850/900/1800/1900 MHz
Frequency	GPS L1, 1575.42MHz GLONASS L1, 1598.0625~1605.375MHz
GPS GLONASS	#1~32 #65~96
Sensitivity	Acquisition: -148dBM, cold start Reacquisition: -163dBM, hot start Tracking: -165dBM
TTFF (No. of SVs>4, C/N>40dB, PDop<1.5)	Hot start: 1sec typical Warm start: 33sec typical Cold start: 35sec typical, 60sec maximum
Position Accuracy	Without aid: 3.0m (50% CEP) DGPS (SBAS (WAAS, EGNOS, MSAS)): 2.5m (50% CEP)
Velocity Accuracy	Without aid: 0.1m/s DGPS (SBAS (WAAS, EGNOS, MSAS, GAGAN)): 0.05m/s
Timing Accuracy (1PPS Output)	±10ns RMS
Altitude	18,000m (60,000ft) maximum
Velocity	515m/s (1000knots) maximum
Acceleration	4G maximum
Update Rate	1Hz (default), 10Hz maximum
Baud Rate	9600bps (default)
DGPS	SBAS (default) [QZSS, WAAS, EGNOS, MSAS, GAGAN]
AGPS	Supported
NMEA Compliant	Yes
Power Supply	VCC: 3.0-4.3V, VBACKUP: 2.0-4.3V
Current Consumption @ 3.3V, 1Hz Update Rate	GPS+GLONASS 35mA acquisition, 29mA tracking
Backup Battery	8.4V 400mAh NI-MH battery
Backup Power Consumption @ 3V (VCC OFF)	15uA typical
Power Saver Modes	4 types
Communication Protocol	TCP/UDP/SMS
COM Ports	3
Digital Inputs	6-channels
Digital Outputs	5-channels

Data	a Security	360 pieces GPRS blind area data report in cache 43,200 pieces of history data in Flash
Diagnostics		Terminal auto-diagnostics Terminal auto-recovery Terminal auto-protection Built-in battery
Communication Features		Long distance monitoring Two-way calling
Real-time Tracking		Time tracking Distance tracking Interval tracking Intelligent mode
Alarms		Entering/exiting geo-fencing Overspeed SOS Fatigue driving Overtime parking
Wor	king Temperature	-40°C to +85°C
Weight		820g (including standard accessories)
Dimensions (L x W x H)		121mm x 82mm x 29mm
Optional External Accessories		Fuel sensor Temperature probe Tyre pressure sensor UHF RFID reader MDT Camera Numeric keypad
	Polarization	Right-hand circular polarized
AL NS	Frequency Received	1.575GHz~1.615GHz
rern/ ATIOI	Power Supply	3.3V
GPS/GLONASS EXTERNAL ANTENNA SPECIFICATIONS	DC Current	3mA < IDC < 30mA at 3.3V
	Total Gain	+25dBi
	Output VSWR	< 2.5
GP ANI	Impedance	50ohm
	Noise Figure	< 1.5dB

FUEL SENSOR (OPTIONAL EXTERNAL ACCESSORY)

High precision industrial auto electronics technology

Precise measurement of fuel level change in operating environment

Simple, reliable and convenient assembly

Fuel Sensor Types

TYPE	OUTPUT
ST-I	4-20mA
ST-V	0-5V
ST-EIA	EIA-485
ST-COM	RS-232
ST-R	0-500Ω



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Specifications

INPUT	Voltage	4-70V
볼	Consumption	0.17W/5V, 0.24W/12V, 0.48W/24V
	Voltage	0-5V
	Current	4-20mA
	Emulated Resistive	10-500Ω
OUTPUT	Digital	RS-232, EIA-485, CAN (optional)
0	Baud Rate	2400, 4800, 9600, 57600, 115200
	Resolution	0.5mm
	Accuracy	0.5%
ENT	Operating Temperature	-40°C to +85°C
ENVIRONMENT	Storage Temperature	-40°C to +105°C
ENVI	Sealing	IP67
MEDIUM	Fuel Type	Diesel Bio-diesel Kerosene Petrol (not suitable for conducting medium)
	Material - Housing	Industrial aluminum
SICAL	Material - Electrode Pole	Aluminum alloy
PHYSICAL	Sizes	250mm, 400mm, 550mm, 650mm, 750mm, 950mm
	Weight	40g (for 550mm size)



Advantages and Benefits

FUEL SAVINGS

Optional real-time fuel consumption monitoring by the administrator

Prevents unauthorized route diversions

Prevents fuel fraud

Decreases vehicle idling time

Can improve km/litre by upto 20% by monitoring fuel

wasting driving habits

Curbs unnecessary speeding

Enables distance monitoring

Displays map view of fleet summary or single vehicle

Provides real-time location and route data

Provides transit mapping at route stages

Enables dispatch efficiency Optimizes vehicle utilization

Issues user-defined automated real-time alerts

Enables halt monitoring with precise location and time

Enables setting of geo-fences and strict no-go areas

SMS will be sent to relevant stakeholders on specific incidents

Emails will be sent to relevant stakeholders on specific incidents

Speed violation report with graphs

Tracks vehicle movement in unsafe areas

Monitors and logs driver performance and safety habits

Provides verifiable data for valid claims

Live tracking enables prompt customer updates

Enables monitoring of critical deliveries

Increase in on-time deliveries

Enables dispatch of nearest vehicle

Reduction in direct supervision time

Provides electronic reports and history logs

Environmental savings through better efficiency

FLEET EFFICIENCY

ALERTS

DRIVER SAFETY

CUSTOMER SATISFACTION

AUTOMATIC COMPLIANCE

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Terms and Conditions:

The vehicle should be OBD-II compliant with corresponding sockets/connector available under the dashboard. The tracking system is dependant on satellite coverage of the vehicle route. Each on-board device includes a pre-paid SIM card supplied by the customer, which enables connection.

* taxes extra Essen reserves the right to modify specifications without notice.



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