



GREENROAD™

Edge™

GreenRoad's field-proven driver behavior models, in-cab coaching and change management technologies enable companies to create an organization-wide safety culture, improving fleet safety while dramatically reducing fleet operating costs.

For over a decade, GreenRoad Edge™ has served as the in-vehicle “coach” for hundreds of fleets throughout the world, making GreenRoad the global leader in fleet safety.

The product's core strengths include a comprehensive ability to detect safety events, combined with effective real-time driver. Using patented safety event detection technology, GreenRoad Edge™ creates a highly accurate driver behavior model, increasing driver confidence and buy-in into the system. Contextual in-cab feedback keeps drivers focused and helps them self-correct in real-time.

GreenRoad Edge™ has no physical connection with the OBDII diagnostic port or vehicle CANbus, and requires no other connection to the vehicle other than as a power source. Therefore, its use does not expose the vehicle – or, by extension, the company - to security risks.

Key Features

Real-Time Safety Events Detection and Classification

GreenRoad Edge™'s safety event detection capability is second to none. It uses GreenRoad's patented and proprietary technologies to create an accurate model of driver behavior.

GreenRoad uses thousands of G-force thresholds to accurately model the risk associated with certain maneuvers, based on category, exact maneuver type (out of over 150), event severity and vehicle profile.





Real-Time Driver Feedback

GreenRoad Edge™'s real time driver feedback is the difference between simple driver monitoring and the ability to induce real behavioural change and skill improvement.

GreenRoad Edge™ deploys a small, unobtrusive LED display panel in the vehicle to let drivers know how safely they are driving, both to indicate safety events as they happen and the overall safety measure of the current trip.

Driver Identification

Driver identification technology enables correct attribution of safety events when multiple drivers operate the same vehicles.

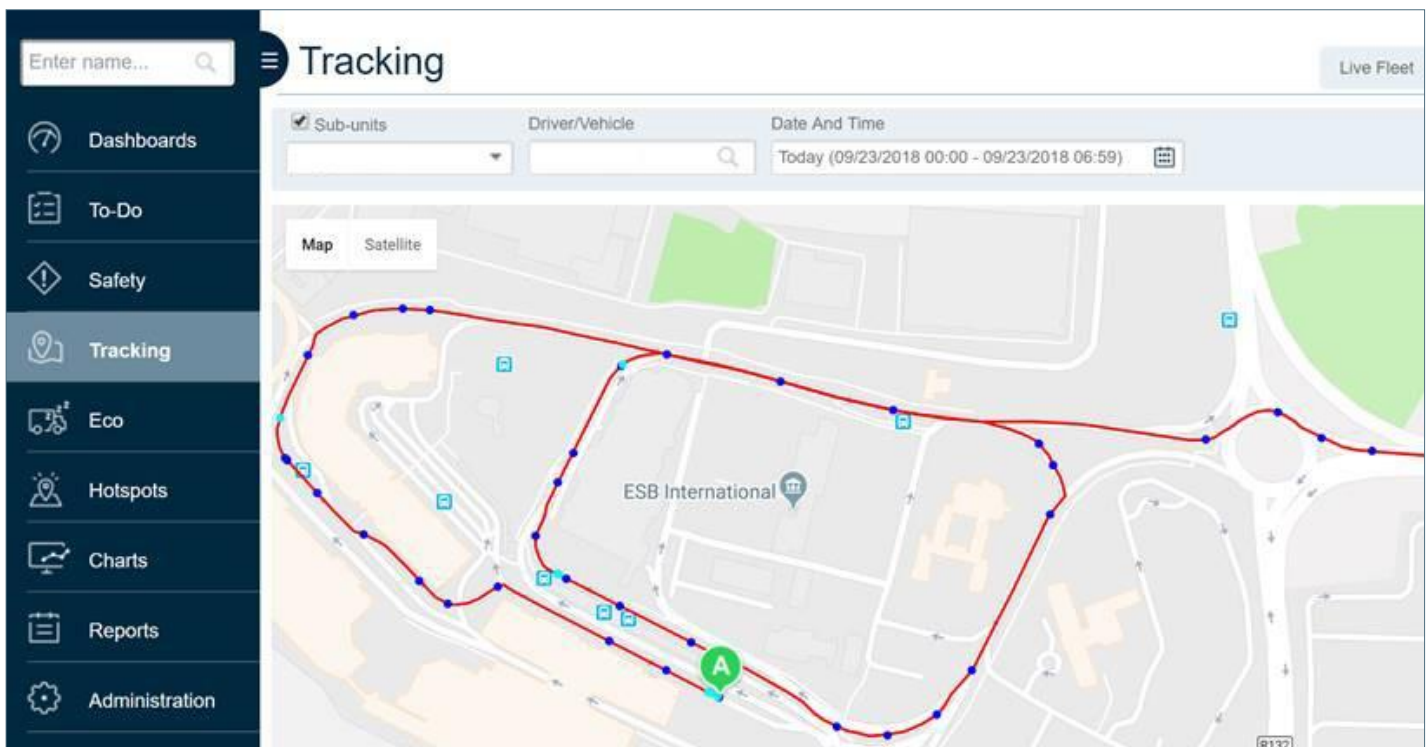
GreenRoad Edge™ provides two options for driver identification: RFID and Dallas iButton technology. Personal driver RFID tags communicate with an RFID reader, which are able to detect the tags based on proximity. The Dallas iButton is comprised of a personal driver key, and a reader positioned on the vehicle dashboard. A touch of the key to reader is all that is required to associate the driver with the vehicle.

Extensive Input / Output Options

GreenRoad Edge™ uses serial communications and proprietary RF communications to expand GreenRoad's physical reach within vehicles and to serve as a sensor hub that collect additional data from a variety of sensors. It serves as a gateway to the outside world by sending this data over the cellular network to GreenRoad servers.

Examples inputs include backing sensors, temperature sensors, auxiliary driver button etc.

Example outputs include speakers for custom-design messages for drivers.



Advanced Tracking

GreenRoad Edge™ uses patented technologies, including context-based variable sample rates, to optimize its use of collected GPS data, and thereby to provide data-efficient and accurate positioning information.

This technology, in conjunction with snap-to-road algorithms, allows GreenRoad to provide highly-accurate true-to-life tracking information.

System Information	
V5.1 processing unit	H20,W 80,L 120 (mm).Housing: Polycarbonate–RoHS.
Unit frequencies	Processor14.7456MHz RTC32.768 KHz RS232 3.6864MHz
Dashboard-mounted display unit	H13,W 30,L 40 (mm) Housing: Polycarbonate–RoHS
GPRS/GPS Module	Onboard BGA Frequency: GSM/GPRS 850, 900, 1800, 1900MHz WCDMA B 1, 2, 4, 5, 8 GPS 20 ch.1575.42 MHz Protocols: NMEA,Binary, TAIP
System Weight	900gr
Connections	
Connections	18AWG wires to vehicle battery 2A ATO fuse
Environment	
Operating Temp	*-20° to +70° C
Storage	40° to +85° C
Power	
DC Voltage	9 – 30 V
Sleep Mode	<22ma
Normal	50-70mA
Transition AVG	200mA
Certifications	
US	EMC - FCC part 15 PTCRB
EU	CE Mark EMC EN 301 489 & Safety EN 60950 Radio EN 301 511 E Mark RoHS 2002/95/EC
Application Interface	
Over The-Air-Commands	Remote calibration, update of system parameters, remote update of manoeuvre database, remote firmware loading
Interfaces	
In vehicle LED Display	Presents real-time feedback to the driver on unsafe manoeuvres that were detected and of system operation
Wires	serial RS485, 1@wire, RF Communications, GPIO
Driver Association	Dallas Key, RFID