

DataLogger 7 Series - GEN 2 Vehicle Telematics

Danlaw's DataLogger 7-Series vehicle telematics solution is a one-of-a-kind, hybrid wireless communication device that enables data communication and connectivity via GSM and Bluetooth wireless connections. Danlaw's hybrid communication approach provides wireless data transmission by using the driver's smartphone or the DataLogger's dedicated GSM/GPRS wireless data connections.

Hybrid Bluetooth-GSM Communication Model



Enhancements

- Smaller Size – ultra-compact
- Integrated Bluetooth Connectivity
- Hybrid and Electric Vehicle Support
- Enhanced 3-Axis Accelerometer
- Assisted A-GPS – No cost autonomous
- Cost Effective

Features

- OBD-II data collection
- Industry leading vehicle compatibility
- Self-Installed – plug-n-go via OBD-II port
- Self-Contained – no external antennas
- Ignition ON/OFF detection
- Dual Mode Wireless – GSM and Bluetooth
- Cost effective data transmission
- 3-Axis Accelerometer - 13-bit sampling
- Self-Normalizing Accelerometer
- 50 Channel GPS with A-GPS support
- Over-the-air re-flash (FOTA)
- Enhanced Anti-Tampering
- Real-time Event Capture and Transmission
- Certifications – FCC, PTCRB, AT&T, RoHS

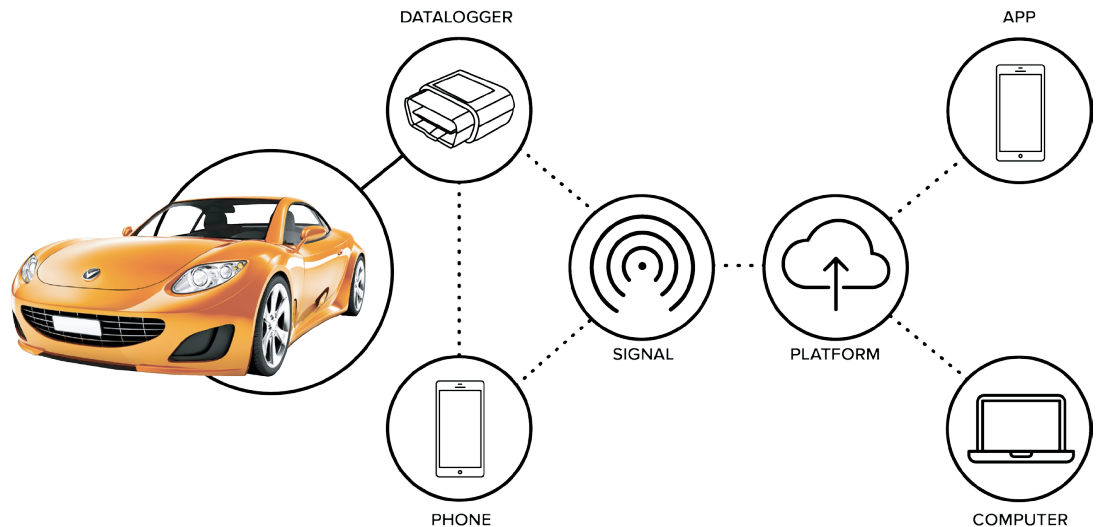
The DL 7-series telematics platform represents Danlaw's ongoing commitment to improving technology by reducing device size and cost, without compromising the features that insurance and fleet telematics industries require.

Danlaw's goal is to provide its clients with the industry's best automotive grade, self-installed OBD-II wireless communication device for monitoring, logging, and transmitting vehicle network messages and position data. Many of Danlaw's insurance and fleet telematics clients require a Quality-of-Service that ensures the consistent and timely delivery of vehicle and position information to their backend servers. The DL 7-series delivers on this need.

The DL 7-series provides the nation's largest fleet and insurance companies with the most reliable connection to their vehicles, while offering the most cost effective connection to their data.

Markets

- Insurance (UBI, PAYD, PHYD)
- Teen Tracking
- Loyalty Programs
- Fleet Tracking
- Mobile Resource Management (MRM)
- Roadside Assistance
- Vehicle Diagnostics
- Government and Military
- Custom Applications



DataLogger 7 Series - GEN 2

Physical Characteristics

Dimensions	Ultra Compact (L = 43 mm, W = 46 mm, H = 23 mm)
Weight	31.2 g (1.1 oz)
Environment	IP64
Temperature Range	-40°C to +85°C (operating) -40°C to +85°C (storage)
Humidity	0% to 95% (non-condensing) (SAE J1455)
Shock, Vibration & Heat	SAE J1455 & SAE J1211

Certifications

Carrier Certifications	FCC, PTCRB, and AT&T Certified
Environmental Certifications	RoHS Compliant

Electrical Characteristics

Supply Voltage	12V (min. 9V to max. 24V)
Current Consumption	<3 mA Average (during Sleep mode) <100 mA @ 12VDC (Data Upload)
Voltage Protection	Over and Reverse Voltage, Load Dump (J1113/11), Short Circuit, Transients (ISO 167502), ESD (J1113/13)
Current Protection	Internal protection (2 amps)

Vehicle Communication

Protocol Support	GMLAN, FNOS, ISO 15765, ISO-9141-2, J1850 PMW, J1850 VPW, KWP-2000, ISO-14230-4
Protocol Detection	Automatic vehicle protocol recognition
Ignition ON Detect	Automatic wake-up from sleep mode
Ignition OFF Detect	Automatic sleep mode on IGN OFF (saves power)

Wireless

Cellular GSM/GPRS	Quad-Band: 850/900/1800/1900 MHz, GPRS class 10
Output Power	Class 4 (2W) @ 850/900 MHz Class 1 (1W) @ 1800/1900 MHz
RF Sensitivity	107 dBm typical @ 850/900 MHz 106 dBm typical @ 1800/1900 MHz
GPRS	Class 10
COMM	TCP/IP, UDP, & FTP
SMS	Point-to-Point MO & MT SMS cell broadcast
Jamming Detection	GSM Jamming Detection
Bluetooth	Bluetooth 2.1 +EDR, multi-phone pairing, Secure Simple Pairing (SSP), Serial Port Profile (SPP)
Antenna	Internal built-in
FOTA	Firmware-Over-The-Air update for configuration and complete device firmware

GPS

Receiver	50-channel GPS receiver, SBAS, WAAS, EGNOS, MSAS, Tracking: -162 dBm
Antenna	Internal built-in
Cold Start	<27 seconds TTFF Sensitivity -147 dBm
Hot Start	<1 second Sensitivity -156 dBm
Data Acquisition Rate	4 Hz (Typical 1 Hz)
Accuracy	Position 2.5 m CEP, SBAS 2.0 m CEP
A GPS	AssistNow™ Autonomous (no data usage cost)
Anti-Jamming	Integrated GPS anti-jamming

Accelerometer

3-Axis	X, Y, Z output
Output Resolution	+/- 2, 4, 8, 16 g (13 bit sampling max.)
Auto-Normalization	Self-Calibrating, Auto-Normalization of the data to the vehicle's direction of motion

Misc.

Installation	Self-Installed (10 sec or less)
Data Collection Interval	Configurable (1 Hz max.)

Contact Us

Danlaw, Inc.

41131 Vincent Court
 Novi, Michigan 48375 USA
 Tel: 1 (248) 476-5571
 Fax: 1 (248) 471-4485
sales@danlawinc.com

This document is provided for information purposes only and the contents hereof are subject to change without notice.

Danlaw reserves all rights to this document and the information contained herein. No warranty or guarantee of any kind, either express or implied, is made in relation to the accuracy, reliability fitness for a particular purpose or content of this document.