OEM/OES telematics

ICD4X – product platform

Vodafone
Power to you

Vehicle manufacturers, public authorities and insurance companies have expressed their intention to use telematics to monitor green driving, improve road safety and offer tailored insurance policies. However, these are just a few of the potential applications.

The new design approach of our telematics platforms is in response to this rapidly changing and growing market. Vodafone Automotive's ICD4X is a fully-automotive telematics platform dedicated to OEM and OES applications. The latest addition to the platform, ICD45, is ready for future global market requirements.

ERA-GLONASS in Russia: The Government Accident Emergency Response System ERA-GLONASS is aiming to reduce emergency services' time-to-arrival by up to 30%, saving up to 4,000 additional lives every year. The system was commissioned in January 2015.

eCall in Europe: The initiative is intended to bring rapid assistance to drivers involved in a collision anywhere in the European Union by triggering an alert automatically or voluntarily, via dedicated push buttons with voice kit option.

Description

A fully automotive telematics platform dedicated to OEM and OES applications. It features a high level of integration with a vehicle, ensuring reliability of gathered data.

The system also enables users to manage multiple applications – from safety and security, to convenience and diagnostics – and mobiles services.
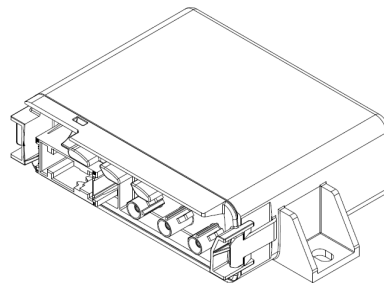
Key features

- Reliable and compact design.
- 2G/3G GSM network connectivity.
- GPS and GSM antennas can be internal or external.
- Short-range radio frequency transceiver for wireless communication with driver card.
- Three-axis accelerometer sensor for system wakeup.
- Serial peripheral interface flash memory to save trip data.
- SIM chip and/or SIM card holder support.

- Internal NiMH rechargeable backup battery able to fulfil all insurance requirements.

Benefits

- OEM/OES dedicated telematics unit integrated in the vehicle; can use CAN or LIN communication protocol, or remain unconnected.
- Ready for ERA-GLONASS and Galileo satellite communication.
- "Mobile services" can be accessed via smartphone and multiple applications.

Main functions

A highly sensitive GPS receiver allows the ICD45 to perform pinpoint tracking of the equipped vehicle.

Additionally, the device is designed to monitor and transmit the following alerts or notifications over the GSM/GPRS network, supporting the following requirements:

- **Security:** Vehicle tracking.
- **Safety:** Crash notification, eCall, bCall, crash reporting.
- **Convenience:** Remote services, e-mobility.
- **Cost of ownership management:** Pay-as-you-drive, trip management.
- **Education:** Driver behaviour recording.

Other functions

Ready for eCall and ERA Glonass:

- Audio (4W power over 4ohm speaker)
- 24g acceleration sensor for incident reconstruction
- 8/16MB flash memory options

Ready for 2.4GHz DC technology migration from 434MHz (unidirectional and bidirectional).

Product Data

Nominal operating voltage (VDC):	12 to 24
Operating voltage range (VDC):	9 to 32
Control unit operating temperature (°C):	-40 to +85
Current consumption rate (mA): • Fully operational (ignition ON - GPS and GSM/GPRS on) typical 300mA • In sleep mode (ignition OFF — ready to respond to a possible wake-up event) < 3mA	
Control unit dimensions (mm):	155 x 96.5 x 36
Weight (g):	280

Homologations

ECE-R-10 equivalent to 2009/19/EC Automotive EMC Directive.

99/5/EC RTTE Directive.

Standard compliance

ERA-Glonass.

Law n°27 dated 23/03/2012 against motor insurance fraud/Italy.

Thatcham Cat. 5, TQA/UK.

Incert T021C (tracking), T021D (aftertheft)/Belgium.

SCM TT03/The Netherlands.

Pimot Tracking Devices/Poland.