FLEX

Multi Source Vehicle Data Interface

FLEX is a multi source vehicle data interface. FLEX is part of the range of Vidiwave products for advanced vehicle data solutions. With configurable functionality and extended connectivity FLEX can be used in automotive applications like Telematics, Real time monitoring, Measurement & Control or Interfacing.

What is a Vehicle Data Interface
A Vehicle Data Interface is an electronics device to read data from a vehicle Data Network and translate the data into standardized protocols like CANbus FMS/J1939 or RS232.

You can read data from a brand specific vehicle network with this protective interface. With Vidiwave solutions you do not have to visit the dealer because our FMS interfaces are ready to use.

The Vidiwave FLEX offers more than just streaming data. Vidiwave processes the data inside the interface. We provide you with exact and important data to accomplish advanced fleet management.

Your benefits:
- One solution for your entire fleet
- Trucks, vans, cars
- Auto detects the vehicle
- Analyze trip-, vehicle- and driver performance
- Save fuel, drive better, reduce CO_2
- EU tachodownload compliant
- More data available than a manufacturers interface
- Easy integration with telematics and modems
- Output in CANbus (FMS / J1939) or RS232 (ASCII)
- Non intrusive installation with CANcliQ and DatacliQ

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FLEX connects

Vehicle data networks
FLEX is an advanced FMS interface with connectivity to all the important vehicle data networks like: CANbus, J1939, J1708/J1587, OBD, K-line, L-line, EU Tachograph, ISO11992, serial and proprietary data networks.

Modems and telematics
The powerful FLEX processor manages the data and processes valuable information via unique Vidiwave algorithms. FLEX has output for FMS/J1939 or RS232/ASCII. This makes FLEX perfect as a universal interface for your telematics system and modem.

Special Function Devices (SFD)
Vidiwave Driver Awareness Panel and Trailer Data System connect to FLEX via the SFD ports. These smart ports ensure easy connection and immediate operation. Also the DatacliQ cables connect to the SFD ports.

FLEX is safer

NON intrusive connections
With the Vidiwave CANcliQ and DatacliQ technology the data is gathered via a non-intrusive connection. This technology guarantees that no signals are send to the vehicle data network. This eliminates liability matters, warranty issues or possible wrong connections.

CANcliQ
Vidiwave CANcliQ reads vehicle signals without making a wire to wire connection. It's the proven and most safe connection on the market.
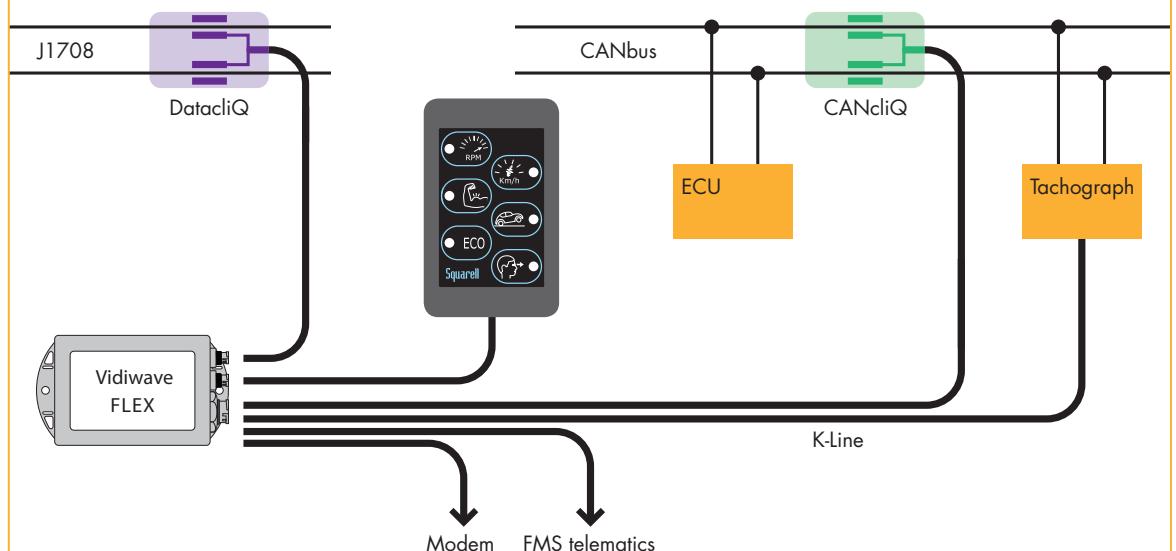
DatacliQ
Vidiwave DatacliQ reads serial bus protocols without making a wire to wire connection. DatacliQ is available for J1708, K-Line and ISO11992.

How does it work?

J1708
DatacliQ
CANbus
CANcliQ
ECU
Tachograph
RPM
Km/h
ECO
Squarell
Vidiwave
FLEX
K-Line
Modem
FMS telematics

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FLEX for every Fleet
FLEX automatically detects the vehicle, sets the correct baud rates and routines, all with one software configuration. This eases preparation and installation and FLEX can be stocked as an universal part. With FLEX remote upload new FLEX software can be upgraded over the air. FLEX installer tools make the FLEX easy to service, commission and administer.

Want more? Get More
Vidiwave developed hundred's of routines for advanced vehicle data processing and analysis. All routines and information items are bundled in ready to use blocks. Every block contains multiple inform information parameters and is available over the output ports on interval, event or request.

FLEX is ready for the future
FLEX contains extra functional ity and capacity for future needs and extensions. Vidiwave is continuously developing for FLEX. With the Pay For Use concept the FLEX is upgrade able for new applications and connectivity on the fly.

FLEX Pay For Use
The function blocks for basic FMS 1.0/2.0 are included in FLEX. Optional Function blocks are available for EcoDrive, Emissions, Trip Profiling, Tacho Download, TechInfo, and more… These function blocks can be enabled via the Pay for Use concept. To enable a function block, just load the purchased license into FLEX.

Optional Function blocks

In the table below we show you some data generated by the FMS Interface.

Ecodrive:
Data set to analyze good economical driving.
Parameters like: greenzone, coasting, cruise, harsh brake.

Emissions:
Data set to analyze the emissions of a vehicle.
Parameters like: CO_2, NO_x, catalyst level

Trip profiling:
The data to analyse a trip in depth.
Stop Analysis, speed diagramming, RPM classing, retarder, torque classing

Trailer and cargo & weight:
To know the load, cargo and weight of vehicles, even on rigid trucks the load measurement can be of importance.
Parameters like: axle load sum, trailer doors, trailer ID, calculated weight, cargo temperature.

Technical analysis:
Parameters to perform more indept analysis of the vehicle signals.
Parameters like: engine profile, brake and clutch pedal percentage, turbo pressure.

Technical information

Dimensions / Weight	Length 100mm, Width 63 mm, Heigth 29 mm/105 grams
Environmental sealing	IP67
Operating temperature	-40°C to 85°C
Power consumption Active	Running, no external load, 30mA at 24V supply
	CAN/RS232 drivers on, 110 mA at 24V supply
Voltage range	10-30V
LED	Two colour programmable LED
Connectors	1x 12 Pole IP67 connector
2x CANbus	Read only selectable, 10-1000 kbit/sec,
	auto baud, J1939, Layer2
1x J1708	J1922/J1587 support
2x K-Line	Tachograph download, Diagnostics, Proprietary support
1x RS232	3 wire RS232, max 230kbaud, proprietary ASCII / Binary
	protocols HDLC/PPP, CCITT16, non-printable Escaping
2x Special Function Device Port	2 ports to connect DatacliQ, DAP, trailer Data system
	and other SFD devices

Vidiwave: Robust Proven Reliable
Vidiwave products are designed for use in automotive and harsh environments. Special casing, high grade
components and IP67 connectors are guarantee for good working over a long life time. FLEX is a Automotive
E-certified product and complies to RoHS.

Order Information

FLX12   **FLEX**
Device with 12-pole connector and 2 SFD connectors
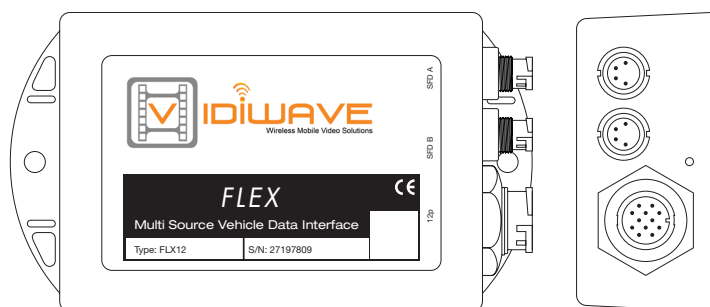
8612-U1   **FLEX cable**
12-pole cable with 2x CAN, 1x J1708, 2x K-Line, RS232, Power and Ground

8612-CQ   **FLEXcliQ cable**
12-pole cable with 1x CANcliQ, 1x CAN, 1x J1708, 2x K-Line, RS232, Power and Ground

8510-210   **DatacliQ cable for J1708**
Cable for contactless J1708 reading with SFD connector