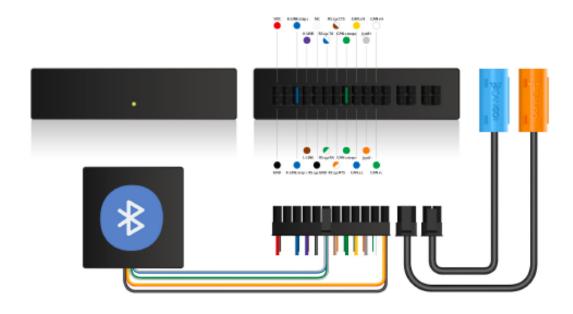




### **FMS** Interface



Our advanced FMS interface can connect to all Vehicle Data Network like CANbus, J1939, J1708/J1587, ISO11992, serial and proprietary data networks and translate the data into standardized protocols like FMS 3.0 or in ASCII protocols on RS232 or Bluetooth.

CANGO FMS interface offers more than just streaming data.

CANGO FMS interface processes the data inside using state of the art algorithms – we calculate better and more parameters than vehicle manufacturer interface.

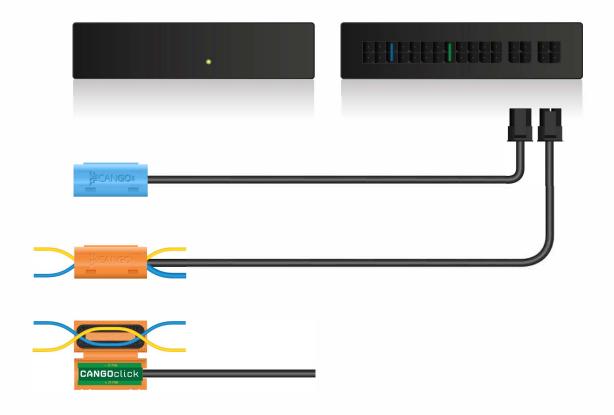
### WHAT IS CANGO FMS INTERFACE?

A FMS interface is an electronics device that acts like a gateway, to read the data from all vehicle data network and translate the data into standard FMS (J1939) data. FMS interfaces have functions to:

- Act as a firewall, so the vehicle data network cannot be interfered
- Translate the proprietary vehicle signals into FMS standard
- Filter data, not all data is made available CANGO FMS interface deliver more. In addition to FMS 3.0 output, you can choose between some output ASCII protocols on serial port RS232 or Bluetooth, like Driver Behavior, DTC and more.



### FMS Interface FEATURES



#### **SAFE READING & OPERATING**

The vehicle computers (EDC, Retarder, Opticruise, EBS, ABS etc.) all communicate via an on-board CAN bus or other vehicle data networks type. FMS interface connect to all vehicle data networks and slots part of the information out through a firewall – one-way only – in a standardized encoded format (FMS 3.0/J1939) to telematics devices.

The firewall and interface are necessary to safeguard against hazards caused by interference with the vehicle's computer systems. CANGO assures the integrity of the vehicle database regardless of which is connected by using smartest tapping device on the market: CANGOclick.

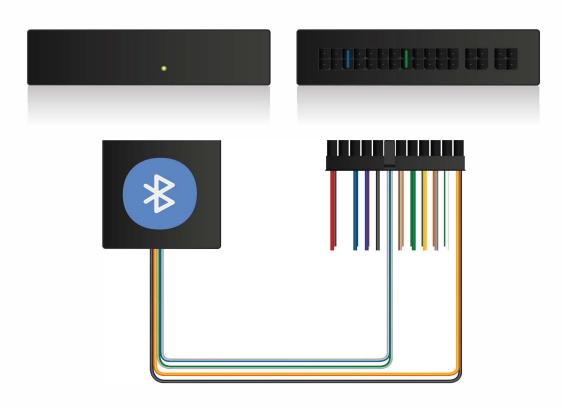
FMS interface use CANGOclick to connect to CANbus and J1708/J1587. This technology guarantees that no intrusive signals are send to the vehicle CANbus or Jbus. This eliminates liability matters, warranty issues or wrong connections.

#### **BENEFITS**

- One cable fits all vehicles/equipment's
- 100% accurate recovering of CANbus and J-bus data
- 100% non-intrusive technology



# FMS Interface FEATURES



#### **TELEMATICS DEVICES**

FMS interface has output in FMS 3.0/CANbus or ASCII protocols/RS232 or Bluetooth. It fits to all telematics systems and modems.

FMS interface deliver state of the art Driver Behavior algorithms that process the data and analyses trip, vehicle and driver performance. Beside Driver Behavior Analyses, FMS interface send in ASCII protocol frames like:

- Instant values
- Totals and calculated values
- Threshold compare values
- Tachograph values
- Diagnostic Trouble Codes
- Drive Behavior Analyses

#### **BLUETOOTH**

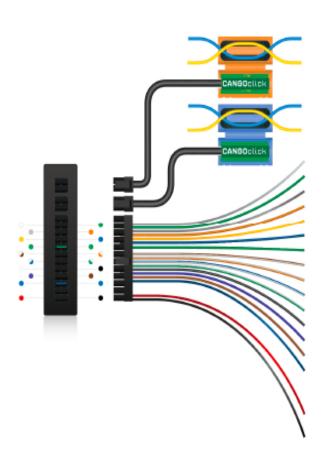
The communication with telematics systems on ASCII protocol for Driver Behavior Analyses can be done easily than ever using Bluetooth cable like option on FMS interface. It's like wire replacement with smart buffering of telematics data transmitting on serial port.

#### **FEATURES**

- Easy setup with CANfigurator software
- OTAP (Over The Air Provisioning) able
- Easy installation with comprehensive install guide for all type of vehicles
- · Free on-line support



# FMS Interface TECHNICAL INFO



- + J1708/1587
- J1708/J1587

CAN HIGH

CAN LOW

CAN1 H

CAN1 L

+J1708

-J1708

CAN2 H

CAN2 L

CAN 2 STRAP - CAN Bus Terminator

RS-232 CTS

**RS-232 RTS** 

RS-232 TX

RS232 PORT

RS-232 RX

RS-232 GND

K-LINE

L-LINE

K-LINE STRAP - Pull up resistor

V+ - Power source (8-36V) GND - Vehicle Ground

#### **TECHNICAL INFORMATIONS**

- Dimensions 72 mmX60 mm X 25 mm
- Weight 110 grams
- Environmental sealing IP53
- 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 10-36VDC
- LED Two color LED
- Connectors
  - 1x 24 pins Molex general connector
  - 2x 4 pins Molex for CANGOclick's

- 2x CANbus, 10-1000 kbit/sec, auto baud, J1939 or custom vehicle protocol, Layer2
- 1x J1708 J1922/J1587 support
- 1x K-Line Tachograph
- 1x RS232 (RTS, RX, GND, CTS, TX), max 250kbaud, proprietary ASCII protcols

### **CANGO: LIFE-TIME QUALITY**

Cango products are designed for use in automotive and harsh environments. Special casing, high grade components and IP53 connectors are guarantee for good working over a long life time. FMS interface is a Automotive E-certified product.



# FMS Interface PRODUCTS & ACCESSORIES

9164-10	<b>FMS INTERFACE</b> Device with general connector Molex 24 pins, 2 x CANGOclick connections Molex 4pins
9164-WL1	FMS INTERFACE CABLE TYPE1 24 pins cable with 2xCAN, 1xJ1708, 1xK-line, 1xL-line, 1xRS232 (RTS, RX, GND, CTS, TX), VDC, Ground. Length 1 m.
9164-WL2	FMS INTERFACE CABLE TYPE 2 24 pins cable with 2xCAN, 1xJ1708, 1xK-line, 1xL-line, 1xRS232 (RTS, RX, GND, CTS, TX), VDC, Ground. DB9 connector for RS232. Length 1m.
9164-BT	FMS INTERFACE CABLE WITH BLUETOOTH 24 pins cable with 2xCAN, 1xJ1708, 1xK-line, 1xL-line, Bluetooth, VDC, Ground. Length 1 m.
9164-D8	D8 TACHOGRAPH CABLE  K-line wire 5 m with Time Junior connector for D8 tachograph connection
6164-CKCAN	CANGOCLICK FOR CANBUS Tapping device for reading CANbus
6164-CKJ	CANGOCLICK FOR JBUS (J1587/1708) Tapping device for reading Jbus
9164-CAN	CANFIGURATOR LIFETIME LICENSE Software for setting-up and configuring of FMS interface
9164-SET	SETTING-UP & CONFIG SERVICES

