

OBD/CANID

Converter OBD2 to CAN-ID

Conversion of OBD-sensor values into CAN-ID

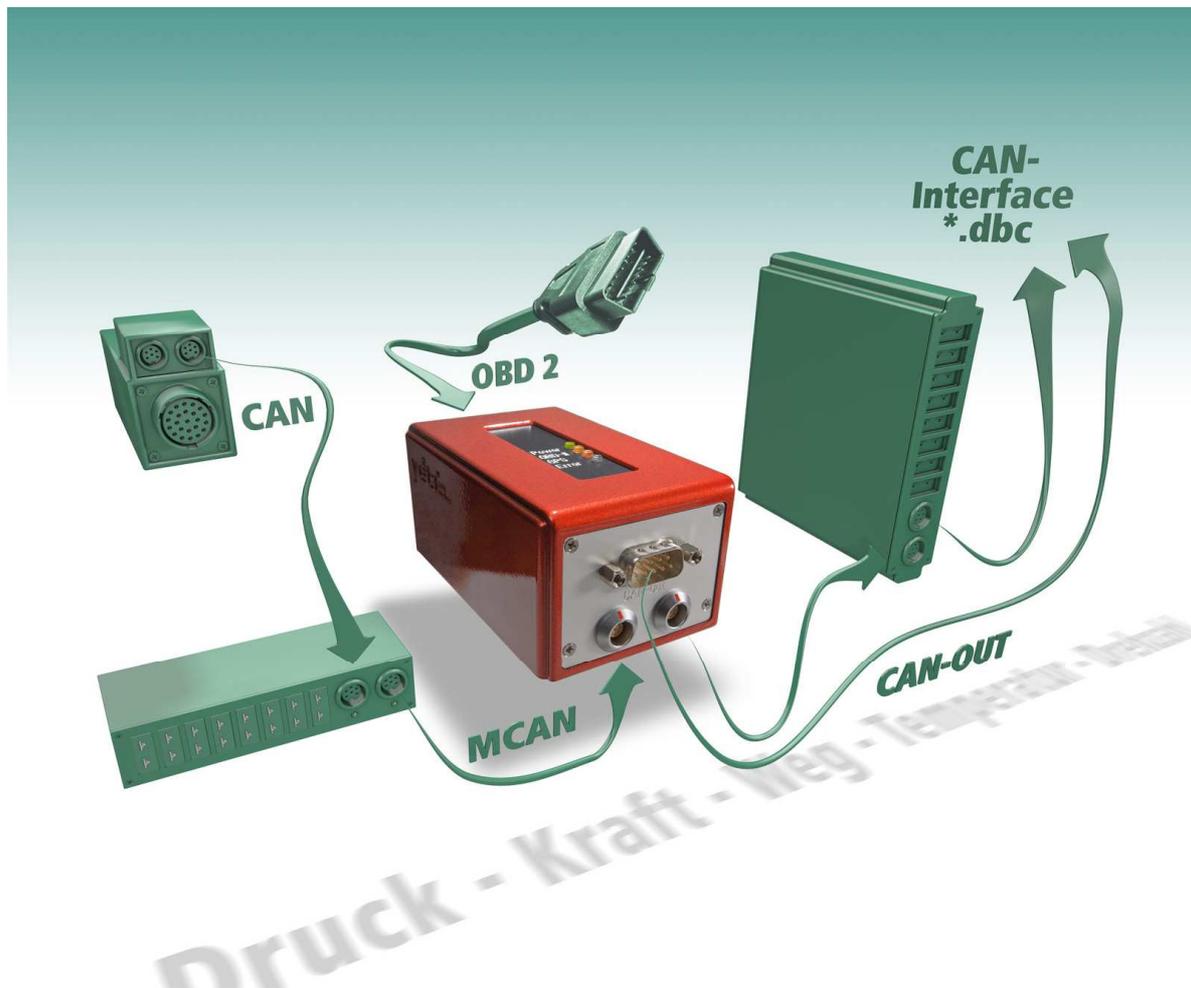
Processing of OBD-sensor values into dbc-files

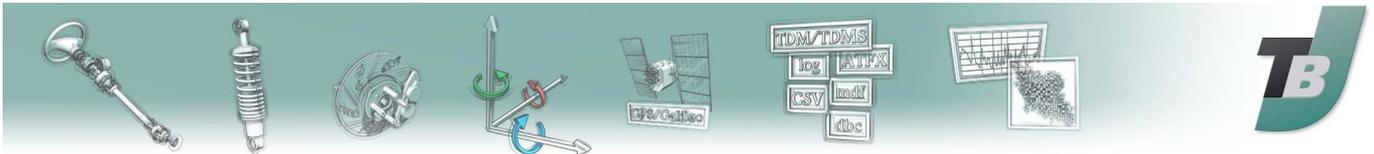
OBD-sensor values can be integrated into CAN-measurement chains

Selectable scan cycle for OBD-sensor values

Option: M-CAN-loop via 2 x 6-pole Fischer or 2 x 10-pole Lemosa

Option: Integrated GPS-receiver (10 Hz)





The picture shows the instrument OBD/CANID including the optionally available GPS-receiver.

OBID/CANID - Konfigurationsprogramm - Version 1.02 - 14.09.2010 - BETA 2

OBID-II Sensoren | GPS Sensoren | Hybrid

Sensor	Typ	Einheit	Wertebereich	OBID-II Mode	OBID-II PID	Aktiv	CAN Ausgabe ID	OBID-II Abfrage-Zyklus
Geschwindigkeit	OBID	kmh	0 - 255 kmh	0x01	0x0D	<input checked="" type="checkbox"/>	100	1
Drehzahl	OBID	UPM	0 - 16383 UPM	0x01	0x0C	<input checked="" type="checkbox"/>	101	1
Kuehlwassertemperatur	OBID	degC	-40 - 215 degC	0x01	0x05	<input checked="" type="checkbox"/>	102	1
Berechnete Motorlast	OBID	%	0 - 100 %	0x01	0x04	<input type="checkbox"/>	0	1
Kraftstoffdruck	OBID	kPa	0 - 785 kPa	0x01	0x0A	<input type="checkbox"/>	0	1
Ansaugdruck	OBID	kPa	0 - 255 kPa	0x01	0x0B	<input type="checkbox"/>	0	1
Motor-Timing	OBID	deg relativ Zyl. 1	-64 - 83,5 deg relativ Zyl. 1	0x01	0x0E	<input type="checkbox"/>	0	1
Ansaugluft-Temperatur	OBID	degC	-40 - 215 degC	0x01	0x0F	<input type="checkbox"/>	0	1
Luftmasse	OBID	g pro sek	0 - 855,35 g pro sek	0x01	0x10	<input type="checkbox"/>	0	1
Drosselklappe	OBID	%	0 - 100 %	0x01	0x11	<input type="checkbox"/>	0	1
Motorlaufzeit	OBID	Sek	0 - 85535 Sek	0x01	0x1F	<input type="checkbox"/>	0	1
Lufdruck	OBID	kPa	0 - 255 kPa	0x01	0x33	<input checked="" type="checkbox"/>	103	1

Automatische CAN-IDs: Start ab ID (Dezimal) 100, Nur für aktive Sensoren, IDs setzen, Alle IDs auf 0, Alle aktivieren, Alle deaktivieren

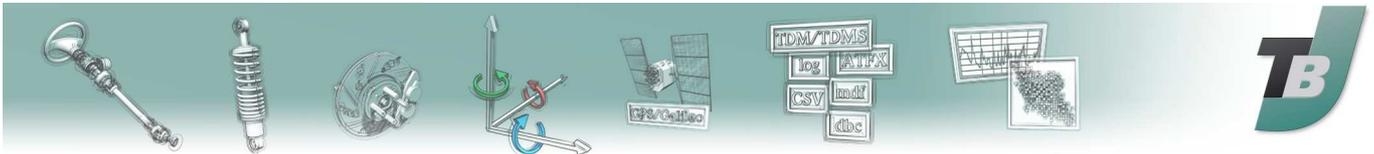
Globale CAN-Einstellungen: CAN Busgeschwindigkeit 1 MBaud, Timeout/Kein-Wert Anzeige (=0xFFFFFFFF)

GPS Einstellungen: GPS Aktiv, GPS Abtastrate (= Ausgaberate) 1 Hz, GPS Profil Normal, GPS Ausgabe nur bei Fix

Einstellungen: positiver offset (DBC Export), Als DBC exportieren, Einstellungen speichern, Einstellungen laden

OBID/CANID: Einstellungen auslesen, Einstellungen schreiben, Gerät verbinden, Bootloader starten, Beenden

HW-Version: n/a Firmware-Version: n/a Seriennummer: n/a Anzahl Steuergeräte: n/a Letzter OBID Modus n/a Supported n/a



The OBD2-protocol standardised by the ISO standard 15765 allows a comfortable tapping of the sensor values provided by the ECU.

Due to the response time of 20 Hz/sensor value in accordance with the ISO standard, the measurands are available at an update rate sufficient for the most common metrological applications.

The system OBD/CANID links the two different bus technologies. In doing so, it bridges a gap in an automotive measurement technology growing increasingly complex.

By means of this convenient tool the OBD-sensor values of every current vehicle model can be tapped and integrated into CAN-measurement chains.

Compatibly with the market standard, the CAN-output protocol is provided via a 9-pole sub-D jack, or optionally, via two additional Lemosas plugs connected in parallel.

Conveniently, the desired OBD-sensor values are selected via a PC-configuration software and given the ID required in the CAN-world. In order to get the most effective use of the total output rate conditioned by the OBD-technology, it is now possible to assign different scan cycles to the OBD-sensor values.

The dbc-file created by means of the configuration software can be imported into all the conventional data logging and analysis programmes and related to other measurands.

Option: Display

For online representation and monitoring on an integrated display, up to 4 OBD-sensor values or pieces of GPS-information can be selected via the PC-configuration software.

To this, two **preset** display layouts are available:

2 sensors numerically, and simultaneous display by means of a bar graph

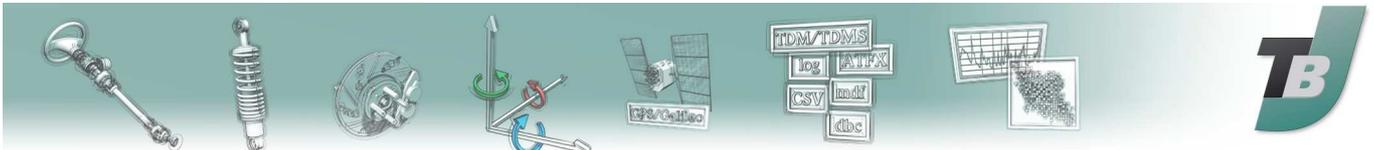
Alternatively: the display of 4 sensor values, in numerical representation

Representation green/black, resolution of 122x32 pixels,



Option: CAN-Lemosas plug

In case the system OBD/CANID is to be integrated into CAN-measurement chains, for integration into the **measurement modules** the CAN-output signal can be additionally applied to two lockable **jacks** connected in parallel, model Fischer S 102A 055-SC, or a 10-pole Lemosas, model FGA.1B.310. Manufacturers of the appropriate CAN-measurement amplifiers are e.g. CAETEC, AFT, IPETRONIK, CSM, etc.



Option: GPS

Additionally, the system OBD/CANID can be equipped with an integrated GPS-receiver.

To improve positioning this supports – if locally available – correction procedures according to EGNOS/WAAS.

What is calculated is the geographic position, speed over ground, height, heading and other location-relevant information.

The information gained by means of the GPS-receiver can also be shown on the display (option), converted into CAN-messages and output at the CAN-jack with individually assignable CAN-IDs.

The combination of OBD2-signal converter and GPS-receiver in one compact unit considerably reduces the tooling times and costs required with regard to common vehicle measurements. Conveniently, the supply voltage required by the unit is fed in via the OBD-cable which is plugged in anyway. OBD-sensor values and GPS-information are output via “one” CAN-cable.



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OBID-II Sensoren | GPS Sensoren | Hybrid

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GPS Laenge	GPS		0 - 0	<input checked="" type="checkbox"/>	104
GPS Breite	GPS		0 - 0	<input checked="" type="checkbox"/>	105
GPS Geschwindigkeit 3D	GPS	kmh	0 - 350 kmh	<input checked="" type="checkbox"/>	106
GPS Geschwindigkeit 2D	GPS	kmh	0 - 350 kmh	<input checked="" type="checkbox"/>	107
GPS Hoehe	GPS	m	0 - 700 m	<input checked="" type="checkbox"/>	108
GPS Fix	GPS		0 - 6	<input checked="" type="checkbox"/>	109
GPS Sat	GPS		0 - 32	<input checked="" type="checkbox"/>	110
gDOP	GPS		0 - 0	<input checked="" type="checkbox"/>	111
pDOP	GPS		0 - 0	<input checked="" type="checkbox"/>	112
tDOP	GPS		0 - 0	<input checked="" type="checkbox"/>	113
vDOP	GPS		0 - 0	<input checked="" type="checkbox"/>	114
hDOP	GPS		0 - 0	<input checked="" type="checkbox"/>	115

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