EDICblue

Bluetooth Interface for Vehicle Electronics

Diagnostic interfaces from Softing are based on the tried and tested EDIC® hardware and software platform. With its Bluetooth® interface and compact design, EDICblue is perfect for use in mobile applications during test drives, in manufacturing and in service.

Areas of Application
- Test drive
- Manufacturing
- Service

Advantages
- Optimized housing design with integrated diagnostic connector
- 2 independent channels: 1 x CAN and 1 x ISO 9141
- Data preprocessing and protocol handling in the interface
- Bluetooth interface to the PC
- Status display via LEDs
- Power management

Integrated Diagnostic Connector
The compact housing concept with an integrated SAE-J1962 connector makes it possible to connect EDICblue directly to the diagnostic connector of the vehicle. Complicated and troublesome arrangement of additional cables is thus a thing of the past.

Wireless
The integrated Bluetooth interface connects the vehicle to the notebook, desktop or test system doing away with the need for cables.

Protocol Handling in the Interface
The vehicle protocols are handled directly in the interface. This ensures fast response times and reliable real-time behavior regardless of the PC operating system. Extensive buffer mechanisms make parallel operation of several communication channels possible.

Software Interfaces
The communication protocols UDS (ISO 14229) and KWP 2000 (ISO 14230, ISO 15765) as well as many OEM-specific protocols are supported via the standardized D-PDU API (ISO 22900-2). With a software layer based on the D-PDU API, the VCI can also be used as a PassThru device in accordance with SAE J2534. Together with the Diagnostic Tool Set DTS from Softing, a total solution in accordance with the MCD-3D standard ISO 22900-3 and ODX technology can be realized.

Flexibility
To ensure it is always perfectly equipped for future applications, EDICblue can be upgraded with software updates. This is also the way to realize customer-specific software solutions.

Technical Data

Format	Approx. 114 x 48 x 25 mm, weight approx. 100 g
Power supply	8 ... 18 V via vehicle diagnostic connector
Current consumption	Approx. 200 mA at 12 V
Microcontroller	16-bit microcontroller XC161CJ, 40 MHz
PC interface	Bluetooth® V1.1 / V2.0, Class 2 (range approx. 10 m) USB V2.0 Full Speed, 12 Mbit/s, mini USB jack type B
Vehicle interface	Diagnostic connector in acc. with ISO 15031-3 / SAE J1962
CAN	1 channel with the following transceiver equipment depending on the product variant: EDICblue: - CAN high-speed in acc. with ISO 11898 and CAN 2.0B - Optional: CAN low-speed transceiver (TJA1054) switchable via software; fixed assignment to free pins 3, 8, 9, 11, 12 or 13 acc. to customer requirements EDICblue-LS: - CAN high-speed in acc. with ISO 11898 and CAN 2.0B - CAN low-speed transceiver (TJA1054) switchable via software; fixed assignment to pins 8 and 9
ISO 9141-2	K- and L-line for 12-V vehicle systems; max. 125 kBaud (depending on the protocol and bus physics)
Digital inputs	Ignition (KL 15)
Power-save mode	Automatic power-off after a settable time, power-on by ignition
Temperature range	Operation: 0 ... +50 °C, storage: -25 ... +85 °C
Vehicle interfering pulses	In acc. with ISO 7637; pulses 1 – 5
EMC conformity	Noise emission: EN 55022, EN 55011 Class A and EN 61000-6-4 (industrial environment) Interference immunity: EN 61000-6-2 (industrial environment) FCC part 15 subpart B limit A (industrial environment)
Radio homologation	EU states, Switzerland, Norway, USA, Canada; other countries on request
Software interface	D-PDU API according to ISO 22900-2 or J2534 API (PassThru)
System requirements	Bluetooth interface Class 1 or Class 2 Operating system see data sheet D-PDU API

Order Numbers

EDICblue	EDICblue hardware with CAN high-speed transceiver including USB cable (3m) and D-PDU API software on data carrier
EDICblue-LS	EDICblue hardware with transceiver for CAN high-speed and CAN low-speed, switchable via software; fixed assignment of CAN low-speed to pins 8 and 9 including USB cable (3m) and D-PDU API software on data carrier
EDICblue-PTD	EDICblue hardware with CAN high-speed transceiver including USB cable (3m) and PassThru software interface on data carrier
EDICblue-LS-PTD	EDICblue hardware with transceiver for CAN high-speed and CAN low-speed, switchable via software; fixed assignment of CAN low-speed to pins 8 and 9 including USB cable (3m) and PassThru software interface on data carrier