# VIN | ING 1000

**Compact USB Interface for Vehicle Electronics** 



VIN|ING 1000 is a compact and universal VCI with USB interface. The combination of sturdiness, compact design and attractive price makes this VCI the perfect choice for use in the Manufacturing and After-Sales Service environment.



## Reliable Protocol Handling

Data preprocessing and protocol handling in the interface ensure fast response times and reliable real-time behavior regardless of the system environment (e.g. software running on the PC). The most important communication protocols UDS (ISO 14229), KWP 2000 (ISO 14230, ISO 15765) as well as SAE J1939 are supported via the standardized D-PDU API (ISO 22900-2). The VCI can also be used as a PassThru device in accordance with SAE J2534. Together with our Diagnostic Tool Set DTS, an integral solution in accordance with the MCD-3D standard ISO 22900-3 can be realized with ODX technology.

#### Future-Proof and Flexible

The VIN ING 1000 can be updated in a software update and can be extended for a range of application scenarios via its USB host interface. Mobile applications can be realized with an optional

Bluetooth dongle and upgrading can take place with a USB memory stick. If required, versions with only one CAN high-speed interface or with a sturdy, lockable USB cable are made available. As an additional option, digital and analog I/O interfaces continue to be available.

#### **Excellent Value for Money**

The implementation of two separate CAN channels and two K-lines in the compact and sturdy design means VIN|ING 1000 represents unique value for money. One of the two CAN channels can be switched by software between CAN high-speed and CAN fault-tolerant.

Vehicle cables with different types of diagnostic connector are on offer for the D-SUB port. Thanks to the shock-absorbing plastic protective caps the device is protected from detrimental mechanical effects from the outside. Furthermore, the VCI avoids possible damage to the vehicle.

## **Areas of Application**

- Universal use in Manufacturing and After-Sales Service
- Fast and reliable flash programming
- Test and validation
- Simulation

### **Advantages**

- Reliable protocol handling in the interface
- State-of-the-art, cost-effective standard VCI
- Multiple vehicle interfaces with a compact design
- Sturdy aluminum housing with protective caps
- Flexible expansion thanks to USB host interface



Technical Data	
Format	Approx. 75 x 90 x 30 mm
Power supply	Alternatively over USB or vehicle interface
Vehicle voltage range	7 to 32 V
Microcontroller	32-bit microcontroller
PC interface	USB V2.0 Full Speed, 12 Mbit/s, pluggable USB cable (jack type B)
Vehicle interface	15-pin DSUB connector, all signals galvanically isolated from the PC interface
CAN	Two separate CAN high-speed channels compliant with ISO 11898-2 CAN channel 2 can be switched by software to CAN fault-tolerant ISO 11898-3
ISO 9141-2	Two K-lines for 12V and 24V vehicle systems, one K-line can be used as L-line Baud rate max. 250 kBaud (depending on the protocol and bus physics)
Temperature range	Operation: -40 +70 °C, Storage: -40 +85 °C
EMC conformity	Emission: EN 55022, EN 55011 Class A, EN 61000-6-3 Immunity: EN 61000-6-2 Safety: EN 60950
Software interface	D-PDU API

Order Numbers	
VINING-1000	Diagnostic interface for 2 x CAN and 2 x K-line with USB interface, including USB cable as well as D-PDU API
VINING-1010 (on request)	Diagnostic interface for 1 x CAN high-speed with USB interface, including USB cable as well as D-PDU API
VINING-1020 (on request)	Diagnostic interface for 1 x CAN high-speed with USB interface, with sturdy and lockable USB cable, including USB cable as well as D-PDU API

Supplementary Products and Services	
KAB16-DSUB15-J1962	Connecting cable to OBD connector (SAE J1962 / ISO 15031-3), cable length approx. 2 m
KAB16-DSUB15-J1939 (on request)	Connecting cable to J1939 connector, cable length approx. 2 m