VIN | ING 2000

Powerful VCI for Manufacturing and After-Sales Service



VIN|ING 2000 is a further powerful VCI for the VIN|ING product family. With a compact design and WLAN, LAN and USB as interfaces to the host system as well as CAN, K-Line and Ethernet to the vehicle, VIN|ING 2000 is particularly well suited for future-proof manufacturing and after-sales service applications.



Remote Applications with D-Server

Thanks to compelling modifications of its predecessor the HSC, VIN|ING 2000 is equipped for innovative and contemporary application scenarios. Highly integrated components and a modular software architecture enable an MVCI diagnostic server to be run on the VCI and stored ODX data to be processed. This enables vehicles in a whole range of mobile applications to be accessed remotely by a tester system.

Use as Stand-alone Device

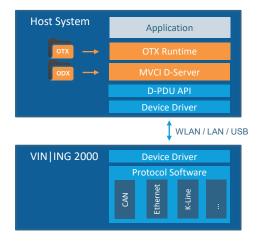
With OTX sequences being run on VIN|ING 2000, entire diagnostic tasks can be processed independently and without a connection to a host system. This makes it possible to realize applications, such as independent programming solutions, actuator diagnostics and other control tasks, simply and at an acceptable price.

Areas of Application Mobile applications in

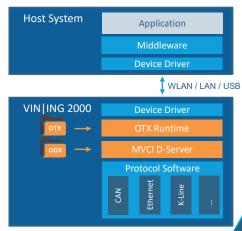
- Mobile applications in engineering/development, manufacturing and after-sales service
- Fast and reliable ECU programming
- Diagnostic tests and data logging in road tests
- Future-proof diagnostic solutions with DoIP (Diagnostics over IP)

Benefits

- Reliable time response thanks to data preprocessing and protocol handling in the interface
- Compact design with integrated diagnostic connector
- Maximum WLAN security thanks to enterprise authentication with certificates
- Flexible USB and LAN cable with magnetic fastening
- Option for remote applications with integration of an MVCI diagnostic server



MVCI D-Server on the Host System



MVCI D-Server on the VIN ING 2000



Technical Data	
Housing	Polyamide housing, approx. 135 x 50 x 25 mm
Power supply	7 32 V via vehicle diagnostic connector
Current consumption	Typically 300 mA at 12 V, depending on the operating mode
Microcontroller	1 GHz ARM Cortex CPU with Realtime Co-Processor
PC interfaces	USB V2.0 high-speed, 480 Mbit/s via optional USB cable LAN 100 MBit/s via optional LAN cable (in preparation) WLAN IEEE 802.11 a/b/g/n/h (2.4 and 5 GHz), 300 MBit/s (Infrastructure and Access-Point) Highest WLAN security due to enterprise authentication with certificate handling
Vehicle interface	Integrated diagnostic connector acc. to ISO 15031-3
CAN	CAN channels for CAN FD with high-speed in acc. with ISO 11898-2
ISO 9141-2	2 K-Line channels for 12V and 24V vehicle systems; one K-Line usable as L-Line; Baud rate max. 250 kBaud (depending on the protocol and bus physics)
Ethernet/DoIP	Ethernet 100Base-TX and Ethernet Activation Line according to ISO 13400-3
Digital inputs	Ignition (KL 15) Two capacitive buttons, movement detector (use depends on the operating software)
Status indicators	2 RGB light diodes for optical signaling (programmable, use depends on the operating software) Acoustic signaling (programmable, use depends on the operating software)
Power management	Configurable stand-by mode <1mA (use depends on the operating software) Wake-up on: CAN, KL 15 and motion sensor
Temperature range	Operation: -20 +50 °C, storage: -20 +85 °C
Protection rating	Dust and splash water protection in accordance with IP52
EMC conformity	Compliant with RED Directive 2014/53/EU and FCC Part 15 Subpart B
Radio permits	Countries of the EU, Iceland, Canary Islands, Liechtenstein, Switzerland, Turkey, Japan, USA In preparation: Australia, Brasilia, China, Hong Kong, India, Canada, Mexico, Philippines, Russia, Singapore, South Korea, Taiwan, Thailand Other countries on request
Software interfaces	D-PDU API according to ISO 22900-2 for Windows and Android (Linux and iOS on request), supported protocols: - UDS on CAN - UDS on IP (DoIP) - KWP2000 on K-Line (on request) PassThru API according to SAE J2534-1 for Windows, supported protocols: - Diag on CAN - CAN RAW - KWP2000 on K-Line (on request)

Order Numbers	
VI-BA-2100	VIN ING 2000 Multibus Interface with WLAN/USB and integrated diagnostic connector (ISO 15031-3), 2 x CAN / CAN FD with high-speed bus physics, 2 x K/L-Line ISO 9141(-2), Ethernet for DoIP Incl. D-PDU API software according to ISO 22900-2 for UDS on CAN and UDS on IP
ZB-KA-1010	MagCode Adapter and USB cable for VIN ING 2000
ZB-KA-1020	MagCode Adapter with Ethernet cable for VIN ING 2000

Supplementary Products and Services	
Softing SDE	The Smart Diagnostic Engine as a platform-independent runtime system for diagnostic functions, sequences and services throughout the entire lifecycle.
Softing DTS	The Diagnostic Tool Set enables the creation of consistent diagnostic functions and sequences based on international standards.
Softing TDX	The flexible solution for diagnostics and flash programming in mobile or stationary use.
Softing VCF	The Vehicle Communication Framework as powerful middleware for all applications in vehicle communication.