

# VIN|ING 2000

Powerful VCI for Manufacturing and After-Sales Service

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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

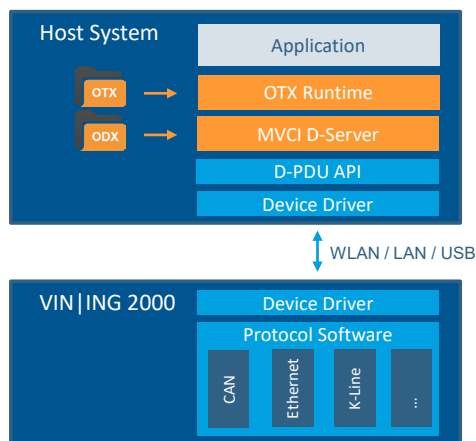
With OTX sequences being run on VIN|ING 2000, entire diagnostic tasks can be processed independently and without a connection to a host system. This makes it possible to realize applications, such as independent programming solutions, actuator diagnostics and other control tasks, simply and at an acceptable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

## Areas of Application

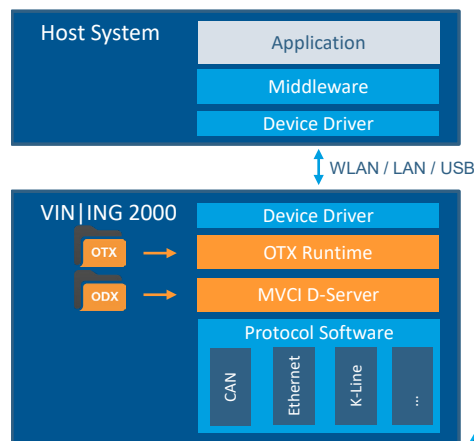
- Mobile applications in engineering/development, manufacturing and after-sales service
- Fast and reliable ECU programming
- Diagnostic tests and data logging in road tests
- Future-proof diagnostic solutions with DoIP (Diagnostics over IP)

## 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



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## Technical Data

<b>Housing</b>	Polyamide housing, approx. 135 x 50 x 25 mm
<b>Power supply</b>	7 ... 32 V via vehicle diagnostic connector
<b>Current consumption</b>	Approx. 300 mA at 12 V
<b>Microcontroller</b>	800 MHz ARM main processor
<b>PC interfaces</b>	USB V2.0 high-speed, 480 Mbit/s via optional USB cable (currently for device configuration only) 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, Ad-hoc and Access-Point) Highest WLAN security due to enterprise authentication with certificate handling
<b>Vehicle interface</b>	Integrated diagnostic connector acc. to ISO 15031-3
<b>CAN</b>	1 - 2 CAN channels high-speed in acc. with ISO 11898-2, CAN FD in preparation
<b>ISO 9141-2</b>	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)
<b>Ethernet</b>	Ethernet 100 MBit/s for DoIP
<b>Digital inputs</b>	Ignition (KL 15) Two capacitive buttons, movement detector (use depends on the operating software)
<b>Status indicators</b>	2 RGB light diodes for optical signaling (programmable, use depends on the operating software) Acoustic signaling (programmable, use depends on the operating software)
<b>Power management</b>	Configurable stand-by mode Wake-up on: CAN, KL 15, RTC and motion sensor
<b>Temperature range</b>	Operation: -20 ... +40 °C, storage: -20 ... +85 °C
<b>Protection rating</b>	Dust and splash water protection in accordance with IP52
<b>EMC conformity</b>	Noise emission: EN 55011, EN 55022 Interference immunity: EN 61000-6-2 , EN 61000-6-4
<b>Radio permits (in preparation)</b>	Countries of the EU, Australia, Brasilia, China, Hong Kong, India, Iceland, Japan, Canada, Canary Islands, Liechtenstein, Mexico, Philippines, Russia, Switzerland, Singapore, South Korea, Taiwan, Thailand, Turkey, Ukraine, USA Other countries on request
<b>Software interface</b>	D-PDU API according to ISO 22900-2 for Windows (Linux, Android and iOS in preparation)

## Order Numbers

<b>VI-BA-2000</b>	VIN ING 2000 Multibus Interface with WLAN/LAN/USB and integrated diagnostic connector (ISO 15031-3) 1 x CAN V2.0B with high-speed bus physics, Ethernet for DoIP Incl. D-PDU API software
<b>VI-BA-2100 (in preparation)</b>	VIN ING 2000 Multibus Interface with WLAN/LAN/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
<b>ZB-KA-1010</b>	MagCode Adapter and USB cable for VIN ING 2000

## Supplementary Products and Services

<b>DTS8L+COS</b>	Standalone ISO MVCI server incl. API access for user applications
<b>DTS8L+MONACO</b>	All-in-one engineering tester for diagnostic and control functions of vehicle ECUs
<b>OTX1L+STUDIO</b>	OTX Studio – complete OTX Workflow solution including Script Editor, Compiler, Debugger and Differ based on DTS Base System as well as Softing-specific OTX-Extensions (ExternCall (DLL), File, XML, Trace)
<b>VC-BA-1000</b>	VCF Developer Base Module ( Developer license for VCI Communication Framework )
<b>VC-SB-1000</b>	VCF Server Base API
<b>VC-SP-1000</b>	VCF Server Premium API