

HSX-S

Ruggedized High-Performance Interface for Vehicle Electronics

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HSX-S Interface is a powerful VCI with USB and LAN interface to the workstation. Due to its ruggedized design, the VCI is perfect for use in harsh environmental conditions as are often found in the Manufacturing and After-Sales Service environment.



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. The use of a powerful 32-bit microcontroller enables parallel operation of several communication channels as is often required in diagnostics and flash applications on the entire vehicle.

Standard-Compliant Software Interfaces

The 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 the Diagnostic Tool Set DTS from Softing, an integral solution in accordance with the MCD-3D standard ISO 22900-3 and ODX technology can be realized.

Flexible and Scalable

Software upgrades are also available for HSX-S ensuring it is always perfectly equipped for future applications. This is also the way to realize customer-specific software solutions.

With the „block sequencer“ option, the VCI can be used stand-alone and for numerous tasks which to date required a PC to be connected. Flash sequences in manufacturing or residual bus simulations at test benches are run autonomously by the interface after an initial configuration.

Ruggedized Design

With the solid aluminum housing, operation in extremely rough environments is guaranteed. The VCI can also be ordered in a version with a pre-assembled top-hat rail mount.

Areas of Application

- Diagnostic applications in Engineering, Manufacturing and After-Sales Service
- Test and validation
- Fast and reliable flash programming
- Functional ECU tests and communication tests

Advantages

- Data preprocessing and protocol handling in the interface
- 2 x CAN and 2 x ISO 9141
- Virtual Machine (VM) for programmable sequences
- Ruggedized aluminum housing
- Status display
- Galvanic isolation



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Technical Data

Format	Approx. 115 x 145 x 40 mm
Power supply	7 ... 32 V via vehicle onboard network
Current consumption	Approx. 250 mA at 12 V
Microcontroller	32-bit PowerPC microcontroller, 384 MHz
PC interface	USB V2.0 Full Speed, 12 Mbit/s, (standard USB cable type B) LAN 100 Base-T (RJ45 jack)
Vehicle interface	26-pin MDR connector, all signals galvanically isolated from the PC interface
CAN	Two CAN high-speed channels, one of which can be switched by software to CAN low-speed
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)
Digital inputs	E.g. ignition (pin 15), operation depending on operating software
Temperature range	Operation: -40 ... +85 °C, Storage: -40 ... +85 °C
EMC conformity	Emission: EN 55011 Immunity: EN 61000-4
Software interface	D-PDU API
System requirements	Operating system Windows 7, Windows 8

Order Numbers

HSX-S	HSX multibus interface with USB/LAN port K/L-line ISO 9141(-2) 2 x CAN V2.0B high-speed, 1 CAN channel switchable to CAN low-speed; For 12/24V vehicle systems; Incl. USB cable and D-PDU API software
HSX-S-MNT	HSX multibus interface with USB/LAN port K/L-line ISO 9141(-2) 2 x CAN V2.0B high-speed, 1 CAN channel switchable to CAN low-speed; For 12/24V vehicle systems; With attachment for top-hat rail assembly Incl. USB cable and D-PDU API software

Supplementary Products and Services

KAB15-HSX-J1962	Connecting cable for HSX from MDR to diagnostic connector (SAE J1962 / ISO15031-3), approx. 2 m
HSX-BS	Optional license for block sequencer for HSX