

HSX Heavy Duty

Ruggedized High-Performance Interface for Vehicle Electronics

The HSX Heavy Duty Interface is a powerful VCI. Due to its particularly 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.

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, a total solution in accordance with the MCD-3D standard ISO 22900-3 and ODX technology can be realized.

Mobility

Thanks to the integrated WLAN interface, the HSX Heavy Duty is particularly suitable for mobile operation in repair shops, After-Sales Service and Manufacturing.

Flexibility

Software upgrades are also available for HSX ensuring it is always perfectly equipped for future applications. This is also the way to realize customer-specific software solutions. The HSX Heavy Duty is available either with or without the WLAN module.

Ruggedized Design

With the solid aluminum housing and industry-proof connectors, protection class IP54 is attained and operation in extremely rough environments guaranteed. The shock-absorbing plastic protective caps prevent the vehicle from being damaged. The ruggedized cables for the USB port and access to the vehicle are equipped with high-performance industry-proof connectors.

AREAS OF APPLICATION

- Mobile applications in Manufacturing and After-Sales Service
- Fast and reliable flash programming

ADVANTAGES

- 2 independent channels: 1 x CAN and 1 x ISO 9141/LIN
- Data preprocessing and protocol handling in the interface
- Fast boot time
- Aluminum housing with impact protection, class IP54
- Ruggedized USB and vehicle cable
- Status display
- Galvanic isolation

Technical Data

Format	Approx. 115 x 157 x 45 mm
Power supply	7 ... 32 V via vehicle diagnostic connector
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, pluggable USB cable (ruggedized round connector) WLAN IEEE 802.11 b/g, safety standards WEP and WPA
Vehicle interface	Ruggedized round connector, all signals galvanically isolated from the PC interface
CAN	One CAN channel high-speed in acc. with ISO 11898-2 and CAN 2.0B with 11-/29-bit identifier
ISO 9141-2	K- and L-line for 12V and 24V vehicle systems; baud rate max. 250 kBaud (depending on the protocol and bus physics)
Digital inputs	e.g. ignition (KL 15), operation depends on the operating software
Temperature range	Operation: -40 ... +85 °C, storage: -40 ... +85 °C
EMC conformity	Noise emission: EN 55011 Interference immunity: EN 61000-4
Radio permits	EU states, Switzerland, Liechtenstein, Norway, Iceland; other countries on request
Software interface	D-PDU API from samtec
System requirements	Operating system: Windows 7, Vista, XP

Order Numbers

HSX-HD	Ruggedized HSX Interface for CAN and ISO 9141-2 with USB interface with D-PDU API and PassThru software KAB10-HSX-HD-USB: ruggedized USB cable, cable length approx. 1 m KAB11-HSX-HD-J1962: connecting cable to OBD connector (SAE J1962 / ISO 15031-3), cable length approx. 3 m
HSX-HD-WLAN	Ruggedized HSX Interface for CAN and ISO 9141-2 with WLAN and USB interface, with D-PDU API and PassThru software KAB10-HSX-HD-USB: ruggedized USB cable, cable length approx. 1 m KAB11-HSX-HD-J1962: connecting cable to OBD connector (SAE J1962 / ISO 15031-3), cable length approx. 3 m

Supplementary Products and Services

KAB10-HSX-HD-USB	Ruggedized USB cable, cable length approx. 1 m
KAB11-HSX-HD-J1962	Connecting cable to OBD connector (SAE J1962 / ISO 15031-3), cable length approx. 3 m