

CAN-USB ADAPTER

## Connecting six CAN FD channels

With the PCAN-USB X6, Peak-System puts six CAN FD channels into a single aluminum casing. This allows the connection of up to six CAN FD or CAN networks to a computer via USB.

The PCAN-USB interface is installed in an aluminum profile casing and is shipped in versions with D-Sub connectors or M12 circular connectors. In particular, the M12 version is suitable for use in harsh environments. The CAN FD standard (CAN with Flexible Data rate) is primarily characterized by higher bandwidth for data transfer. The maximum of 64 data bytes per CAN FD frame (instead of 8 so far) can be transmitted with bit rates up to 12 Mbit/s. CAN FD is downward-compatible to the Classical CAN standard, thus CAN FD nodes can be used in existing CAN networks. However, in this case the CAN FD extensions are not applicable. The adapter is suited for use in test benches with Hardware-in-the-Loop (HIL) simulations for motor vehicles, in the product line testing of CAN-based products, and for working with multiple CAN and CAN FD networks.

The monitoring software PCAN-View and the programming interface PCAN-Basic for the development of applications with CAN connection are included in the scope of supply for free. The API PCAN-Basic allows the development of software with CAN and CAN FD support. Based on this, other programming libraries of standardized protocols from the automotive sector are included. Among them is the API PCAN-OB2 for exchanging specific vehicle parameters. Device drivers are available for Windows 7, 8, and 10, as well as for Linux.

Since the first implementations of CAN FD, the protocol has been improved and is now included in the standard ISO 11898-1. The revised CAN FD standard is not compatible with the original protocol. Peak-System takes this into account by supporting both protocol versions with their CAN FD interfaces. If required, the user can switch to the CAN FD protocol used in the environment by software (non-ISO and ISO). Devices delivered until February 2015 need a firmware update for this functionality.



*PCAN-USB X6 with M12 circular connectors is expected to be available in Q4 2016 (Photo: Peak-System)*

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