

## PK-DP

### Protocol coupler for Profibus-DP





# PK-TAG process coupler

PK-DP interface coupler

Our PK-xx protocol couplers offer simple integration of even intrinsically intelligent subsystems as IO nodes into Profibus-DP networks. With a broad range of performance, they cover numerous application areas - from only couplers to be parameterized to freely programmable small controllers.

PK-xx

#### All couplers have in common:

- Connection as Profibus DP slave with up to 12 MBaud
- Node-ID adjustable
- 1 serial RS-232 interface
- Supply with 24 Volt
- Housing for DIN rail mounting
- Variable I/O range
- Profibus-DP driver software included in scope of delivery

The development of application-specific modules is also possible.



**Performance** 

characteristics



#### PK-DP

The PK-DP coupler is the simplest system in this series. A clearly defined area of application - connection of up to 2 devices with serial interfaces to the bus - and an ASCII driver that can be configured by the DP master using a GSD file allow to use this device out-of-the-box.

### serial interfaces

2 serial devices - even with different operating parameters - can be connected simultaneously via 2 serial interfaces. Both interfaces support max. 76800 Baud.

Interface 1 is fixed as 5-wire RS-232.

Interface 2 can also be implemented as RS-485 or RS-422.

#### **PK-TAG**

The PK-TAG coupler is a high-end system out of this series. With CAN as an additional fieldbus and 2 RJ45 network interfaces, it can be used as a complex data concentrator; digital I/O couples it directly to the environment as a sensor/actuator.

### Installation and connections

Buses and I/O are connected via standard industrial plug-in/screw terminals.

Network can be connected via 2 RJ45 sockets, the integrated miniswitch allows for line cabling. A network stack with Drivers for UDP and TCPand a web server as well as FTP and Telnet are integrated in the system.

Interface 1 is designed as 3-wire RS-232.

Interface 2 is designed as RS-485.

The CAN bus supports baud rates up to 1 MBaud.

2 dig. Inputs 24 V as well as a dig. Output 24 V / 0.5 A, short-circuit proof, for process coupling.

#### programming

If the possibilities of the standard firmware are not sufficient, be it to realize certain protocols, be it to integrate own signal preprocessing or be it to build an intelligent subsystems with own control loops, a customer specific firmware can be developed.

The real-time operating system RTOS-UH is available as a basis for the development. It provides both an interface to the Profibus protocol stack and easy access to the serial interface. A simple program is provided as programming example. Programming is done in ANSI-C.