

With the extension module **SPEEDYBus** the micro PLC **SPEEDY** can be attached as a Slave to an industrial fieldbus system such as ProfiBus DP, InterBus or CAN-bus as well as to the ZANDER **ESI-Bus**. This information, which the fieldbus master sends to the **SPEEDYBus** module can be regarded for switching of **SPEEDY** outputs. Or the fieldbus master can monitor or visualize **SPEEDY** inputs, counter values or register contents. The connection to the different fieldbus systems is made by one of the ZANDER fieldbus plug-in cards **B-DP**, **B-IS**, **B-CAN** or **V-ESI / B-ESI**.



- Connection to the **SPEEDY** extension port
- Exchangeable plug-in card for different fieldbus systems
- Controlling the input/output – functions via the fieldbus
- Program controlling via the fieldbus



Installation

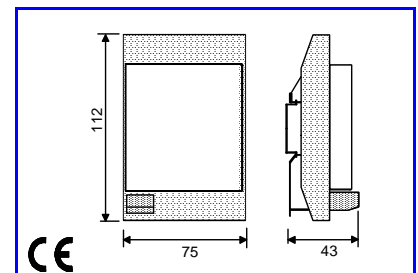
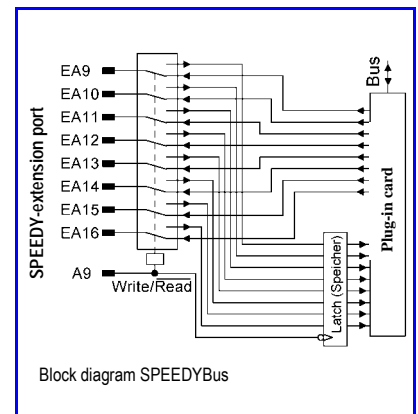
SPEEDYBus is supplied completely installed with the desired ZANDER fieldbus module. The configuration and connection to the fieldbus is made according to the instructions of the enclosed data sheet of the fieldbus plug-in card (**B-DP**, **B-IS**, **B-CAN**, **B-ESI**, **V-ESI**). **SPEEDYBus** is connected with the basis device by the flat cable. To do this the cover of the **SPEEDY** is unscrewed, the flat cable is plugged on the extension port, until it snaps in noticeably and the cover is screwed on again. Pay attention to correct fitting of the toothed washer.

SPEEDYBus is supplied with a voltage of DC 10V..30V via the three pole screw connection block. The positive potential is connected with L+ and 0V with M.

SPEEDYBus is provided with an integrated noise filter, which suppresses possible electromagnetic interferences. A low impedance connection of PE to the protective ground is necessary.

Data communication with SPEEDY

Data communication between **SPEEDY** and **SPEEDYBus** is made by the extension port. Independently of the assigned fieldbus plug-in card 8-bits words can be transferred in each direction by writing and reading of the extension port. During the writing procedure the data word is buffered in the **SPEEDYBus** module and can be read out from there by the fieldbus master. If **SPEEDY** performs a reading via the extension port, the current data word at the outputs of the fieldbus plug-in card is transferred. The data communication is made by the lines EA9 to EA16, the change-over between writing (log 1) and reading (log 0) is made by line A9. A commented sample program (**SPDYBUS.S16**) is included in the programming system **EX_PRESS**.



Specifications	
Operating voltage	DC 24V, +/-20%
Residual ripple	max. 5%
Fieldbus connection	alternatively ProfiBus DP, RS232/V24, RS485, CANopen, InterBus, for more information see separate data sheets B-DP, B-IS, B-CAN, B-ESI, V-ESI
Temperature range	0 --+50° C
Weight	approx. 200g

Order-No	Type
588351	SPEEDYBus ProfiBus DP
588352	SPEEDYBus B_ESI (V24/RS232)
588353	SPEEDYBus V_ESI (RS485)
588354	SPEEDYBus CANopen
588355	SPEEDYBus InterBus

The Speedy extension module SpeedyLog offers four 8-bit analog channels, which can be used alternatively as inputs or as outputs. Thus the spectrum of the applications realizable with SPEEDY is extended with tasks such as temperature monitoring, motor controls, pressure regulator etc..

- Four 8-Bit-analog-channels, alternatively as inputs or outputs
- Inputs 0..10V or 0..20mA, outputs: 0..10V
- Easy connection to the SPEEDY-extension port



Installation

The analog I/O extension module is supplied with DC 24V via the screw-connectors L+ and M. A noise filter and overvoltage protection is integrated. A low impedance connection of PE with protective ground is necessary.

The analog inputs work in a voltage range of DC 0..10V or optionally with a current of 0..20mA. They are provided with RC elements for filtering faster transients and they have an overvoltage protection. The analog outputs have a voltage of DC 0..10V each, providing a current consumption of max. 20mA per channel. The analog I/O's are not electrically isolated.

The extension module is connected by the flat cable with the basis device. To do this the cover of the SPEEDY is unscrewed, the flat cable is plugged on the extension port, until it snaps in noticeably and the cover is screwed on again (do not forget toothed washer!).

Programming

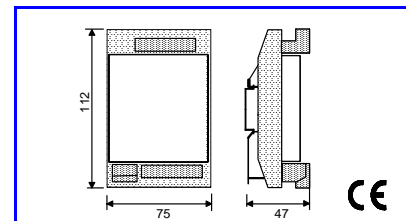
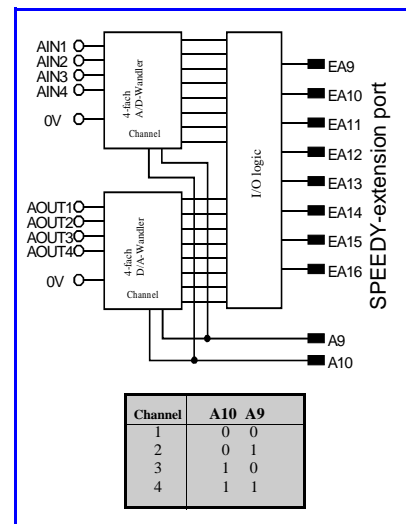
No settings or configurations are necessary for the analog I/O extension module SpeedyLog. The controlling is made completely by the programming of the basis device SPEEDY. The selection of the desired analog channel is done by the ports A9 and A10 (see schematic diagram).

If a value shall be transferred to one of the analog outputs, this must be done by the ports EA9..EA16 (EA16 = most significant bit, MSB), and the ports must

be switched to outputs (< Name>.OE: = 1). If another channel is selected, the value which has been transferred last remains stored.

Reading from an analog input takes place by switching the port lines to inputs (< Name>.OE: = 0).

Each analog channel can only be used either as input or as output, because during the reading of an input value a possibly stored output value of the same channel is lost. A sample program (SPDYLog.S16) is included in the programming system EX_PRESS.



Order-No	Type
588346	SPEEDYLog, Inputs 0..10V
588347	SPEEDYLog, Inputs 0..20mA

Specifications	
Operating voltage	DC 24V, +/-20%
Residual ripple	max. 5%
Inputs	4 x analog, DC 0..10V, optional: DC 0..20mA, resolution: 8 Bit, fault: <2%, transform. time: <0.2ms 0V-connections of the I/O are internally connected.
Outputs	4 x analog, DC 0..10V, max. 20mA resolution: 8 Bit, fault: <2%, transformation time: <5ms 0V-connections of the I/O are internally connected.
Digital interface	8 x I/O + 2 x I, to plug-in at the SPEEDY-extension port
Temperature range	0 -+50° C
Weight	approx. 200g