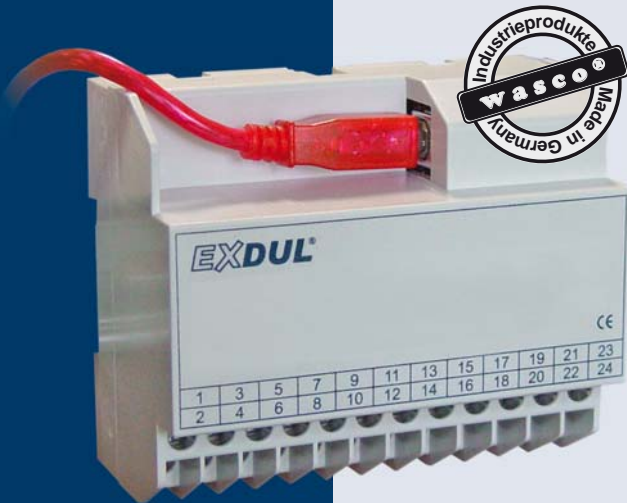


EXDUL-317S

USB Module with 10 Optocoupler Inputs, 8 Optocoupler Outputs and Counter



10 optocoupler inputs

8 optocoupler outputs

2 16-bit counters

USB 2.0 compatible

SPECIFICATIONS

The module EXDUL-317S features ten digital inputs and eight digital outputs each of which are galvanically isolated by top-quality optocouplers and fitted with additional protection diodes. All input optocouplers have integrated Schmitt trigger function. Special high power output optocouplers have a maximum switching current of 150 mA. Two of the ten optocoupler inputs are programmable and usable as digital counters if required. Connecting to a computer is made quickly and conveniently Plug & Play via a USB interface. The required power supply can be provided via USB port or by an external voltage source. The module has a 24-pin screw terminal for the input/output connections and external power supply (if required). The compact chassis enables the module to be used as a portable device with a notebook. For mechanical engineering control applications it can also easily be attached to DIN mounting rail.

Digital Optocoupler Inputs

10 channels galvanically isolated common ground connection (cathodes shared)
2 of the channels programmable as counting inputs
optocouplers with integrated Schmitt-Trigger function
Overvoltage protection diodes
Input voltage ranges
 high = 10 30 V
 low = 0 3 V
Input frequency max. 10 kHz

Digital Optocoupler Outputs

8 output channels galvanically isolated
Common plus connection (collectors shared)
High-capacity optocouplers
Reverse polarity protection diodes
Output current: max. 150mA
Switching voltage: max. 50 V

Counter

2 programmable digital 16-bit counters (2 of the 10 input optocouplers are assigned)
Counting frequency: max. 5 kHz

Power Supply

+5V via USB Port or
+10 V...+24 V via external power supply

To power the device via USB port it may be necessary to configure your operating system software to obtain appropriate power requirements.

USB interface

USB 2.0 compatible
USB connection Plug-and-Play (hot pluggable)

Module connections

1 * 24pin screw terminal
1 * USB port type B

USB connecting cable

1 * USB plug type A
1 * USB plug type B

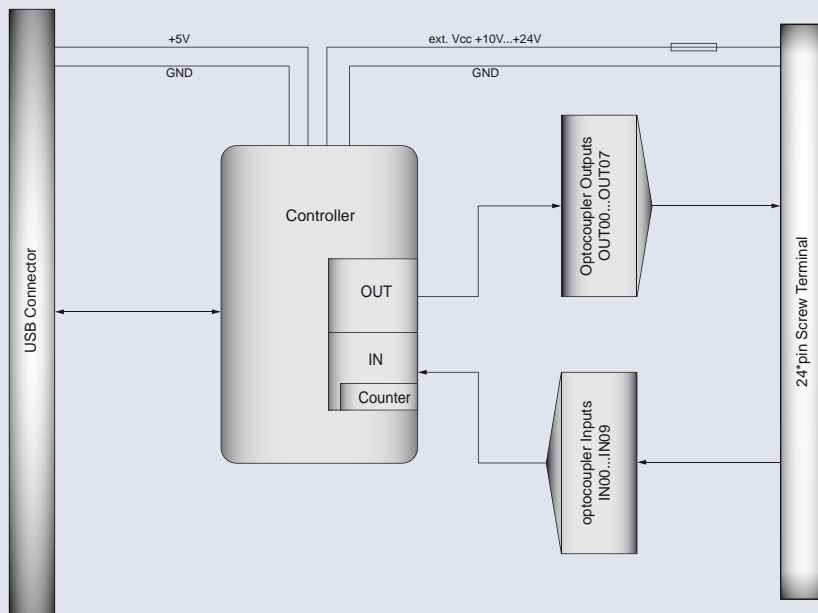
Product dimensions

105 mm x 89 mm x 59 mm (l x b x h)

Casing

Plastic casing with integrated snap-on technology for top-hat rail mounting to DIN EN. Suitable for control and engineering technology mounted to control and distribution boxes, surface mounting or mobile use on a desk.

BLOCK DIAGRAM



PIN ASSIGNMENT

Each single anode of the input optocouplers is individually led to the 24-pin screw terminal block CN1, the cathodes share one screw terminal. The collector connections of the output optocouplers also share one screw terminal, whereas each single emitter connection is fed to individual screw terminals of CN1. Screw terminals Vcc_EXT and GND_EXT are provided for application of an external power supply of 10 ... 24 V.

Screw Terminal CN1

OUT01-	2	1	OUT00-
OUT03-	4	3	OUT02-
OUT05-	6	5	OUT04-
OUT07-	8	7	OUT06-
OUT00...07+	10	9	NC
IN01+	12	11	IN00+ / counter1
IN03+	14	13	IN02+
IN05+	16	15	IN04+ / counter2
IN07+	18	17	IN06+
IN09+	20	19	IN08+
NC	22	21	IN00...09-
GND_EXT	24	23	Vcc_EXT

ASSEMBLY AND APPLICATION OPTIONS



Top-hat Rail Mounting



Wall Mounting



Mobile Use on a Desk

PROGRAMMING

Driver installation from enclosed CD.
The accompanying CD provides sample programs for Microsoft Visual C++, Microsoft Visual Basic 2005 and Microsoft Visual C# 2005

SCOPE OF DELIVERY

USB Module EXDUL-317S
USB connection cable (Type A-B), 3 m
German Description (English on request)
Programs for installation and programming examples

ORDER INFORMATION

EXDUL-317S EDP-No. A-384420
USB Optocoupler I/O Module

SUITABLE ACCESSORIES

DR-60-24 EDP-No. A-3425

Power supply providing one output
24 V / 2,5 A, closed construction
design, contact-protected screw
terminals, overload protection by current
limitation, Power-On-LED



F4652-24-Set EDP-No. A-351024

Industrial high-power relay combi-
nation of two change-over contacts
250 V / 8 A and free-wheeling diode,
snap-on technology for DIN EN top-
hat mounting



For more detailed information about the here listed and other accessories we refer to the corresponding data sheets