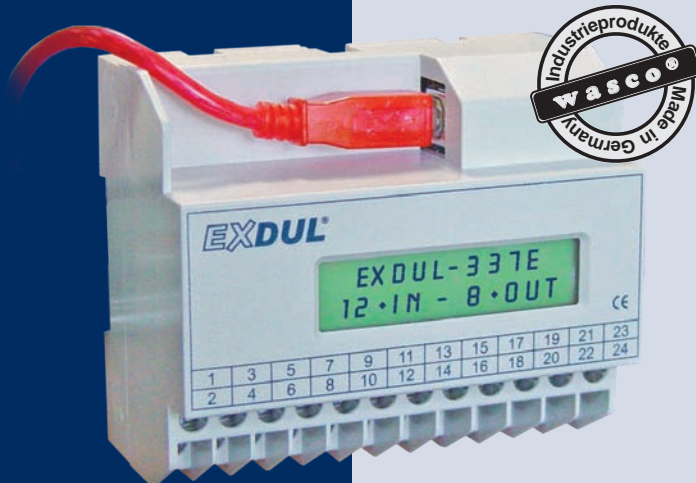


EXDUL-337E

USB Module with 12 Optocoupler Inputs, 8 Relay Outputs and 6 Counters and LCD Display



12 optocoupler inputs

8 relay outputs

6 counters 32 Bit

LCD display

The EXDUL-337E provides 12 digital inputs and eight digital outputs galvanically opto-isolated. The inputs are isolated via high-quality optocouplers protected with additional overvoltage protection diodes. Powerful relays, which can handle a switching current of 2A, ensure the isolation at the outputs.

Six of the 12 optocoupler inputs can also be programmed as hardware-supported 32-bit counter inputs if required.

The necessary operating voltage to the module is provided by either the USB port of the computer or via an external voltage source. The programmable LCD display presents user-specific data or I/O status information.

The module provides a 24-pin screw terminal block for connecting the external power supply as well as the input and output optocouplers.

The compact chassis enables the module to be used as a portable device with a notebook. For mechanical or control engineering it can also be easily wall mounted or attached to DIN mounting rail.

SPECIFICATIONS

Digital Optocoupler Inputs

12 bipolar channels galvanically isolated
Optocoupler contact A with one terminal connection each, Optocoupler contact B sharing one terminal
Overvoltage protection diodes
Input voltage ranges
high = 10 30 V
low = 0 3 V

Digital Relay Outputs

8 output channels galvanically isolated
Relay contact A with one terminal connection each, relay contact B sharing one terminal
Contact: 1 NO contact
Contact current rating: max. 2 A per channel
Contact voltage rating: max. 30 V AC / 30 V DC
Contact power rating: max. 60 VA / 60 W
Mechanical lifetime: min. 10⁶ switching cycles without load
Contact lifetime: 2 A, 30 VAC at NO contact, ca 2*10⁵ switching cycles
Switching frequency under load: typ. 10/min
Switching frequency without load: typ. 300/min

Counters

6 hardware supported programmable digital 32-bit counters (6 of the input optocouplers are assigned)
Counting frequency: max. 5 kHz

LCD Display

Matrix display with 2 lines and 16 columns presenting 16 signs each line
Programmable to display communication data, I/O status or user specific data

Operation voltage

+5 V (via USB port of the PC)
+10 V...+30 V (via external power supply)

USB interface

USB 2.0 compatible
USB connection Plug-and-Play (hot plug-gable)

Connection Terminals

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

USB connecting cable

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

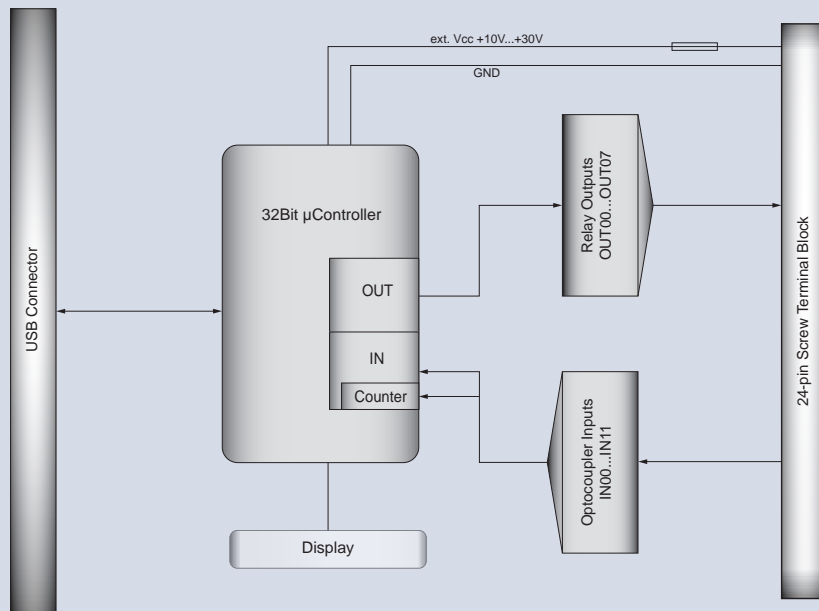
Product dimensions

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



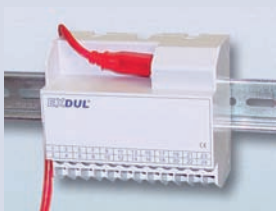
PIN ASSIGNMENT

Terminals Vcc_EXT und GND_EXT are provided for an application of 10 ... 30 V external voltage supply.

Screw Terminal CN1

DOUT01A	2	1	DOUT00A
DOUT03A	4	3	DOUT02A
DOUT05A	6	5	DOUT04A
DOUT07A	8	7	DOUT06A
DIN00 / Counter0	10	9	DOUT00 .. 07B
DIN02 / Counter2	12	11	DIN01 / Counter1
DIN04 / Counter4	14	13	DIN03 / Counter3
DIN06	16	15	DIN05 / Counter5
DIN08	18	17	DIN07
DIN10	20	19	DIN09
DIN_COM	22	21	DIN11
GND_EXT	24	23	Vcc_EXT

ASSEMBLY AND APPLICATION OPTIONS



Top-hat Rail Mounting



Wall Mounting



Mobile Use on a Desk

PROGRAMMING

Windows®:

Driver and program examples for Java, VB.NET, C++.NET, C#.NET, LabView Tutorial

Linux®:

Driver and program examples for C, C++ and Java (see manual)

on enclosed CD or download at:
www.messcomp.com, Section Support - Software

SCOPE OF DELIVERY

USB Module EXDUL-337E

USB connection cable (Typ A-B) 3m long

German Description (English on request)

Programs for installation and programming examples

ORDER INFORMATION

EXDUL-337E

EDP-No. A-385440

USB Optocoupler/Relay I/O Module

SUITABLE ACCESSORIES

DR-60-24

EDP-No. A-3425

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



F4652-24-Set

EDP-No. A-351024

Industrial power relay combination with two changeover contacts 250 V / 8 A and free-wheeling diode, snap-on technology for DIN EN top-hat rails



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

Product and company names mentioned may be trademarks of their respective owners