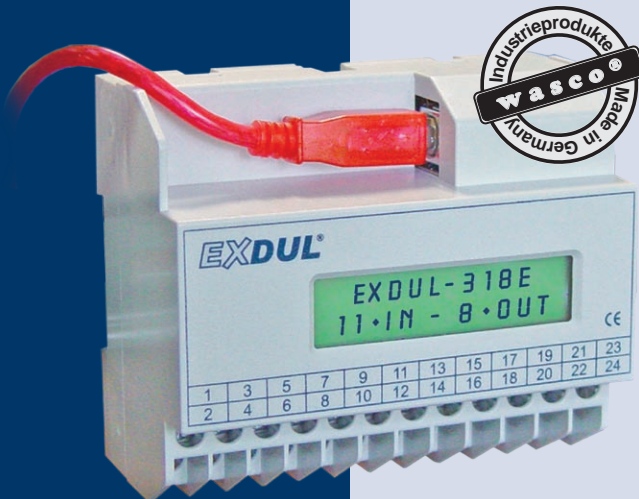


EXDUL-318E

USB Module with 11 Optocoupler Inputs, 8 Optocoupler Outputs, 6 Counters and LCD Display



11 optocoupler inputs

8 optocoupler outputs

6 32-bit counters

LCD display

The module EXDUL-318E features 11 digital inputs and eight digital outputs each of which are galvanically isolated by top-quality optocouplers. The bipolar inputs are protected by additional overvoltage protection diodes. The outputs are protected by reverse polarity diodes and can switch 1A per channel.

Six of the 11 optocoupler inputs are programmable as hardware supported digital 32-bit counter inputs if required.

The required power supply can be provided via USB port or by an external voltage source.

A programmable LCD display presents I/O status information or user-specific data.

The connections of the power supply and the connection of the input and output optocouplers are fed to a 24-pin screw terminal block.

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.

SPECIFICATIONS

Digital Optocoupler Inputs

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

Digital Optocoupler Outputs

8 output channels galvanically isolated
Optocoupler contact A with each one terminal connection, Optocoupler contact B sharing one terminal
Reverse polarity protection diodes
Switchable freewheeling diodes at all of the channels
Voltage CE: max. 30 V
Output current: max. 1A per channel
Switching time typ. 60µs (24V, 100mA)
Release Time: typ. 250µs (24V, 100mA)

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 as I/O status display or user specific data display

Power Supply

+5 V via USB Port or
+10 V...+30 V via external power supply

USB Interface

USB 2.0 compatible
USB connection Plug&Play (hotpluggable)

Module connections

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

USB connecting cable

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

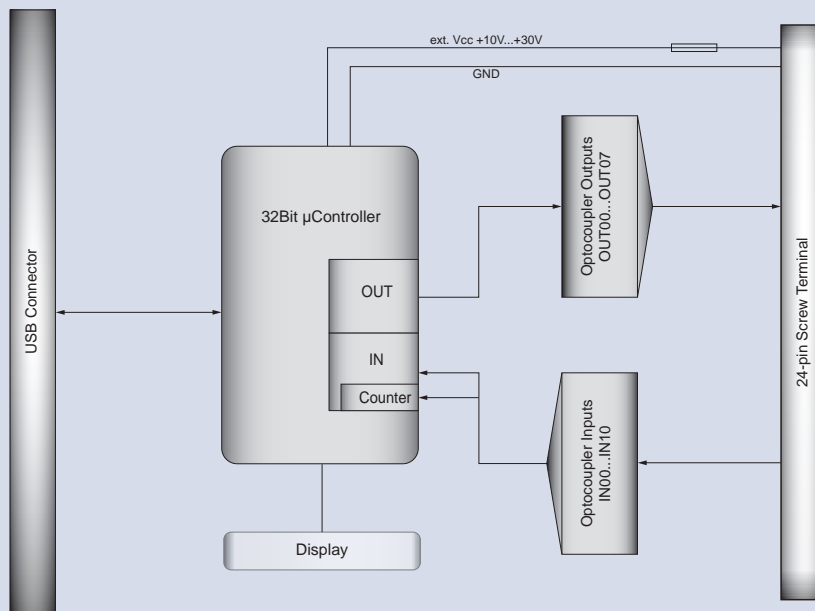
Product dimensions

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

The terminals Vcc_EXT and GND_EXT are intended to provide an external supply voltage of 10 ... 30 V.

Screw Terminal CN1

DOUT01+	2	1	DOUT00+
DOUT03+	4	3	DOUT02+
DOUT05+	6	5	DOUT04+
DOUT07+	8	7	DOUT06+
DOUT_D	10	9	DOUT00 .. 07-
DIN01 / Counter1	12	11	DIN00 / Counter0
DIN03 / Counter3	14	13	DIN02 / Counter2
DIN05 / Counter5	16	15	DIN04 / Counter4
DIN07	18	17	DIN06
DIN09	20	19	DIN08
DIN_COM	22	21	DIN10
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 example programs as of Java, VB.NET, C++.NET, C#.NET, LabView Tutorial

Linux®:

Driver and example programs as of C, C++ and Java (see manual)

on accompanying CD or Download visiting www.messcomp.com, Support - Software

SCOPE OF DELIVERY

USB Module EXDUL-318E

USB connection cable (Type A-B), 3 m

German Description (English on request)

Programs for installation and programming examples

ORDER INFORMATION

EXDUL-318E

EDP-No. A-384540

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 combination 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

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