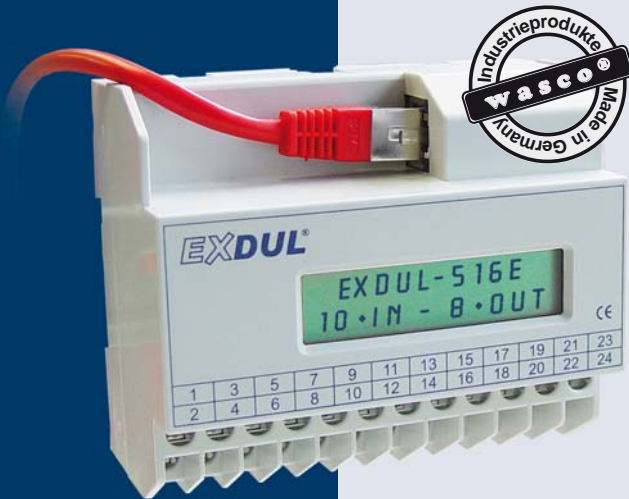


# EXDUL-516E

**Ethernet Module with 10 Optocoupler Inputs, 8 Optocoupler Outputs (Ground Switching), Counter and LCD Display**



**10 optocoupler inputs**

**8 optocoupler outputs**

**1 counter 16-bit**

**LCD display**

**10Base-T Ethernet**

## SPECIFICATIONS

EXDUL-516E provides 10 digital inputs and 8 digital outputs galvanically isolated by high-quality optocouplers and additional protection diodes. All input optocouplers have integrated schmitt trigger function. Special high power output optocouplers manage a maximum switching current of up to 150 mA. One of the ten input optocouplers is programmable and usable as a digital counter if required. An LCD display presents user-specific data at initialisation and I/O status information at running operation. The module can be connected easily and conveniently to a network or PC in a plug and play manner via an Ethernet interface. To power the device an external power supply is necessary. The connections for the external power supply as well as the connections for the input and output optocouplers are led 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 also allows easy wall mounting or uncomplicated clipping to DIN-EN mounting rails.

### Digital inputs by optocouplers

10 input channels, galvanically isolated  
common ground (cathodes shared)  
1 of the channels programmable as digital counter  
optocouplers with integrated Schmitt-Trigger function  
over voltage protection diodes  
input voltage ranges  
high = 10 .... 30 V  
low = 0 .... 3 V  
input frequency max. 10 kHz

### Digital outputs by optocouplers

8 channels galvanically isolated  
common ground (emitter shared)  
high-capacity optocouplers  
reverse polarity protection diodes  
output current max. 150mA  
switching voltage max. 50 V

### Counter

1 programmable 16-bit counter (1 of the 10 input optocouplers is assigned)  
counting frequency max. 5 kHz

### LCD Display

Matrix display with 2 lines and 16 columns  
presenting 16 signs each line  
Info display during booting-up  
I/O status display during operation

### Operating voltage

+10 V...+24 V  
(external voltage supply necessary)

### Ethernet Port

10Base-T Ethernet Interface

### Module circuit points

1 \* 24-pin screw terminal strip  
1 \* RJ45 jack

### Network cable

RJ45 network cable Cat5 or above

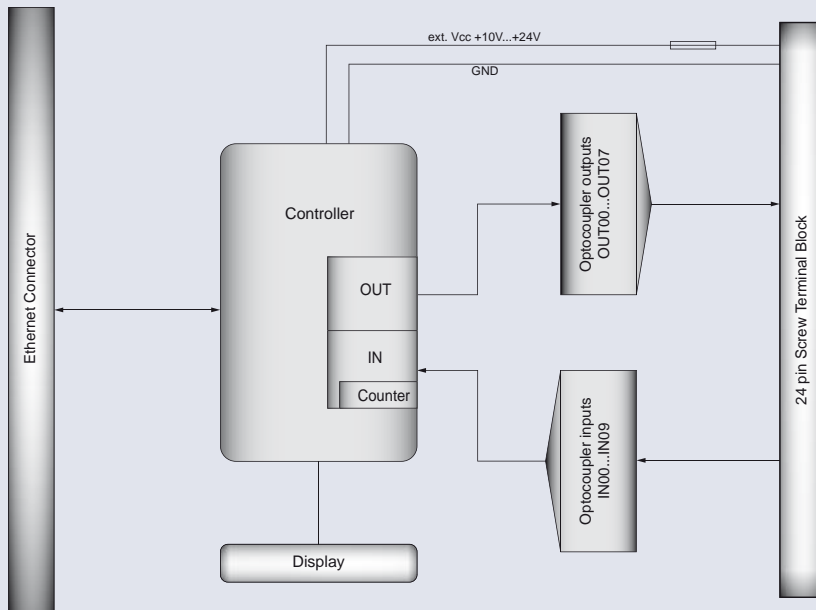
### Dimensions

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

### Casing

Plastic casing with integrated snap-on technology for DIN EN rail mounting  
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 emitter connections of the output optocouplers also share one screw terminal, whereas each single collector connection is fed to individual screw terminals of CN1. Screw terminals Vcc\_EXT and GND\_EXT are allocated for application of an external power supply of 10 ... 24 V.

### Screw Terminal Block CN1

OUT01+	2	1	OUT00+
OUT03+	4	3	OUT02+
OUT05+	6	5	OUT04+
OUT07+	8	7	OUT06+
NC	10	9	OUT00...07-
IN01+	12	11	IN00+ / Counter1
IN03+	14	13	IN02+
IN05+	16	15	IN04+
IN07+	18	17	IN06+
IN09+	20	19	IN08+
NC	22	21	IN00...09-
GND	24	23	Vcc

## 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

Ethernet Module EXDUL-516E  
Cat5 Ethernet patch cable 1 m  
German Description (English on request)  
Programs for installation and programming examples

## ORDER INFORMATION

EXDUL-516E EDP-No. A-374340  
Ethernet Optocoupler I/O Module

## SUITABLE ACCESSORIES

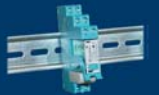
DR-60-24 EDP-No. A-3425

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