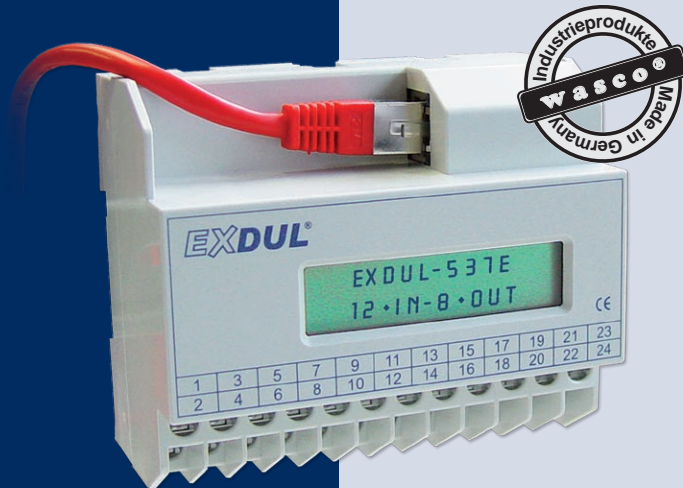# wasco®

EXDUL-537E

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

12 optocoupler inputs

8 relay outputs

6 counters 32 Bit

LCD display

SPECIFICATIONS

The EXDUL-537E 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.

An external power supply powers the module with the required operating voltage. The programmable LCD display presents programmable user-specific data or digital 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.

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. $10*10^6$ switching cycles without load
Contact lifetime: 2 A, 30 VAC at NO contact, ca $2*10^5$ 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 I/O status or user specific data

Power Supply
+10 V...+30 V via external power supply

Ethernet Interface
10/100Base-T Ethernet Interface

Module connections
1 * 24pin screw terminal
Ethernet RJ45 socket

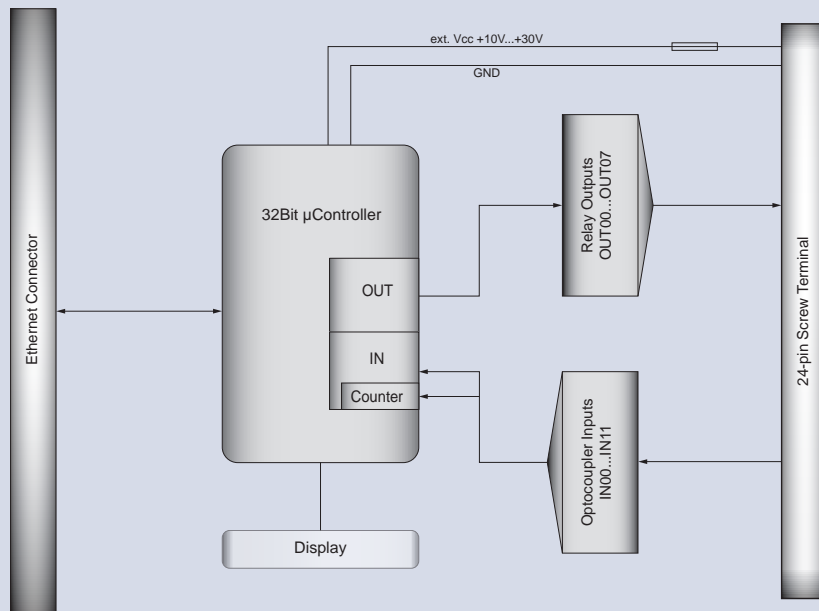**Ethernet connecting cable**
RJ45 network cable Cat5 or later

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

ext. Vcc +10V...+30V

GND

Ethernet Connector

32Bit µController

OUT

IN

Counter

Relay Outputs OUT00...OUT07

Optocoupler Inputs IN00...IN11

24-pin Screw Terminal

Display

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

Ethernet Module EXDUL-537E
Cat.5 Ethernet cabel 1 m
German Description (English on request)
Installation and sample programs

ORDER INFORMATION

EXDUL-537E   EDP-No. A-375440
Ethernet Optocoupler 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

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