

EXDUL-592E100

Ethernet Module with 4 Analog Voltage Inputs, 2 Analog Current Inputs, 1 Optocoupler Input, 1 Optocoupler Output and 3 Temperature Measuring Units PT100



- 4 A/D inputs 16 bit**
voltage measurement
- 2 A/D inputs**
current measurement 4..20mA
- 1 optocoupler input**
- 1 optocoupler output**
- 3 temperature measuring units**
PT100 3-wire sensing
- 1 counter 32 bit**
- LCD Display**

EXDUL-592 features either four ground referenced or two differential 16-bit A/D input channels. Several bipolar input voltage ranges (+/-0.63 V, +/-1.27 V, +/-2.55 V, +/-5.1 V, +/-10.2V) can be adjusted. The two bipolar current inputs (+/- 20mA) are calibrated to 4..20mA. For temperature measurement the module features 3 measuring units with PT100 sensors, each of which with individual current source and metering inputs. The conversion process including the associated configuration of the A/D components (selection of range and channel) is triggered by software commands. Additionally the module provides one digital input and one digital output which are opto-isolated galvanically by high-quality optocouplers and are equipped with additional protection diodes. The special high power output optocoupler copes with a switching current up to 150 mA. The optocoupler input may be programmed and used as a 32-bit counter input if required. The programmable LCD display presents digital and analog I/O status information or programmable user-specific data. An external power supply is required to supply the necessary operating voltage to the module,

SPECIFICATIONS

A/D inputs voltage

4 inputs single-ended (se) or 2 inputs differential (diff) or combined se/diff selectable via software
Resolution: 16 bit
Input voltage range bipolar:
+/-0,63 Volt, +/-1,27 Volt, +/-2,55 Volt, +/-5.1 Volt, +/-10.2 Volt
FIFO: 10000 values
Input resistance: 500 MΩ
Over voltage protection: 50V
max. sampling rate:100kHz

A/D inputs current

2 inputs
Resolution: 15 bit
Measuring range +/- 20mA
Calibrated to 4..20mA
Input resistance 120Ω
FIFO: 10000 measured values
max. sampling rate 100kHz

Optocoupler input

1 bipolar channel
Over voltage protection diodes
Input voltage range
high = 10..30 Volt
low = 0..3 Volt

Optocoupler output

1 channel
High capacity optocouplers
Reverse polarity protection
Output current: max. 150 mA
Switching voltage: max. 50 V

Counter

1 programmable counter 32 Bit
(allocated to the optocoupler input)
counting frequency: max. 5 kHz

3 Temperature measuring units PT100

3-wire sensing

LCD Display

Matrix display with 2 lines and 16 columns presenting 16 signs each line
Programmable for presentation of customized data or I/O status display

Operation voltage

external power supply required
+10 V...+30 V

Ethernet Interface

100Base-T Ethernet Interface

Connection Terminals

1 * 24-pin screw terminal block
Ethernet RJ45 socket

Ethernet connection lines

RJ45 network cable Cat5 or later

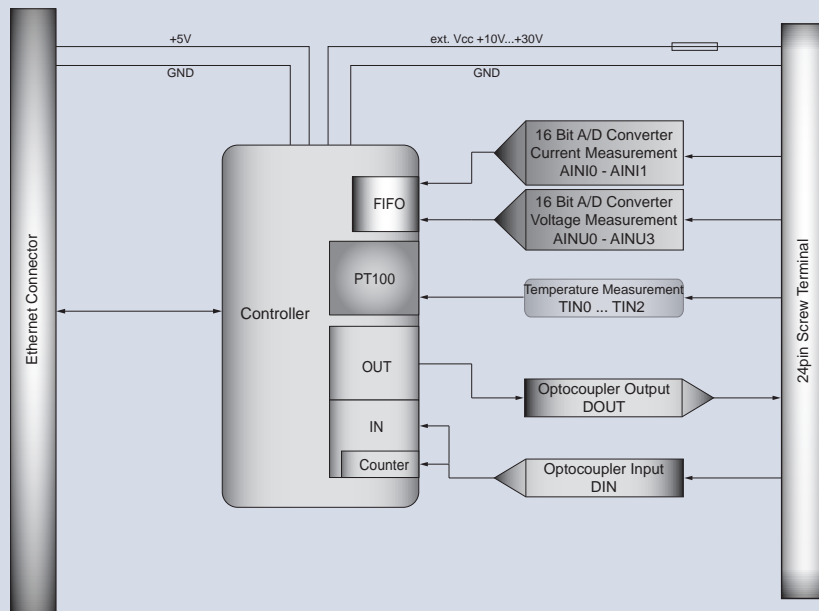
Dimensions

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

Casing

Insulating 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

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

Screw Terminal CN1

AINU1+	2	1	AINU0+
AINU3+	4	3	AINU2+
AINI0-	6	5	AINI0+
AINI1-	8	7	AINI1+
FORCE0+	10	9	AGND
FORCE0-	12	11	RTDIN0+
RTDIN1+	14	13	FORCE1+
FORCE2+	16	15	FORCE1-
FORCE2-	18	17	RTDIN2+
DOUT0-	20	19	DOUT0+
DIN0-	22	21	DIN0+
GND_EXT	24	23	Vcc_EXT

ASSEMBLY AND APPLICATION OPTIONS



Top-hat Rail Mounting



Wall Mounting



Mobile Use on a Desk

The module provides a 24-pin screw terminal block for connecting the external power supply and the analog or digital inputs and outputs. 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.

PROGRAMMING

Driver installation from the enclosed CD. Information about the supported Windows versions is available in section support of www.wasco.de. Sample programs for Microsoft Visual C++, C# and Microsoft Visual Basic are included on CD.

SCOPE OF DELIVERY

Ethernet Module EXDUL-592E
Cat.5 Ethernet cable 1 m
German Description (English on request)
Installation and sample programs

ORDER INFORMATION

EXDUL-592E EDP-No. A-372220
Ethernet Optocoupler I/O Module

SUITABLE ACCESSORIES

DR-60-24

EDP-No. A-3425

Power supply providing an output 24 V / 2,5 A, closed construction design, contact-protected screw terminals, overload protection via 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