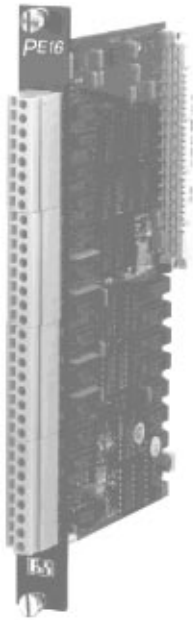


A6

ANALOG INPUT MODULES PE16 - 16 INPUT U, I, PT100, NTC, PTC

PLC SYSTEMS
MULTICONTROL COMPONENTS



PE16

- 16 Analog Inputs
- Voltage Measurement (0 to 10 V or 0 to 2.5 V)
- Current Measurement (0 to 50 mA)
- Temperature Measurement (PT100)
- Resistance Measurement (NTC, PTC)
- Resolution 16 Bit
- Software Set Digital Filter (-50 dB, -85 dB, -120 dB)
- Software Operation with Standard Function Block

GENERAL INFORMATION

The analog input module PE16 is used for current, voltage and resistance measurements. It has 16 analog 16 bit inputs for voltage measurement (0 to 10 V or 0 to 2.5 V), current measurement, PT100 temperature sensors (2 or 3 wire) as well as NTC and PTC temperature sensors. Different types of sensors can be connected to the individual channels. All channels have adjustable filters. Sensor type, measurement type and filter time can be defined by writing to control registers and jumper settings.

SLOTS

The analog input module PE16 can be operated in the following slots of the MULTI, MIDI and M264 racks.

Rack	Slot	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
MULTI Base Rack		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MULTI Expansion Rack		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MIDI		○	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○
M264		●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○

● The module can be operated in this slot
 ○ The module cannot be operated in this slot

ORDER DATA

ECPE16-0	Analog Input Module, 16 Channels, current, voltage and resistance measurement, resolution 16 bit, without galvanic isolation, software adjustable digital filter for every channel
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TECHNICAL DATA

PE16

Number of Inputs	16
Galvanic Isolation	NO
Input Signal, Sensor Types	Voltage (0 to 10 V / 0 to 2.5 V) Current (0 to 50 mA) PT100 (2 wire, 3 wire) NTC Resistance Measurement (1 to 50 kΩ) PTC Resistance Measurement (0 to 2 kΩ)
Measurement Precision	
For Voltage Measurement	±0.5 %
For Current Measurement	±2.5 %
For PT100 Measurement	±1.0 %
For NTC Measurement	±1.0 % (to 10 kΩ)
For PTC Measurement	±1.0 %
Digital Filter	
Level 1	-50 dB with 50 Hz (-60 dB with 60 Hz)
Level 2	-85 dB with 50 Hz (-95 dB with 60 Hz)
Level 3	-120 dB with 50 Hz (-125 dB with 60 Hz)
Conversion Time	
With Filter Level 1	ca. 200 msec per Channel
With Filter Level 2	ca. 400 msec per Channel
With Filter Level 3	ca. 800 msec per Channel
Power Consumption	
At +8 V	0.4 W
At +15 V	0.7 W
At -30 V	0.8 W
Documentation	Hardware Manual MULTICONTROL
German	MAHWMULTI-0
English	MAHWMULTI-E
French	MAHWMULTI-F
Italian	MAHWMULTI-I
Spanish	MAHWMULTI-S

CONNECTIONS

Voltage or current signals, resistance or temperature sensors can be connected to both connections of a channel. Either two wire or three wire connections can be utilized with PT100 temperature sensors. The sense line requires its own channel for a three wire connection.

SOFTWARE OPERATION

The analog inputs are operated with standard function block AINE. This function block is a standard component of software package SWSPSTD01-0 (see section A7 "PLC Programming" for more information).

The name of a configuration table is connected to the AINE function block. The following information is entered in this table:

- Method of measurement (Current, Voltage, PT100, NTC, PTC)
- Input Filter (200 msec, 400 msec, 800 msec)
- Scaling
- Linearization