

# Model EP7416 - 16 Mixed I/O PIFA

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## Description

- ❑ See *General PIFA Specifications* on page 132.
- ❑ EP7416 has:
  - 4 analog outputs of the type **Standard AO**.
  - 4 analog inputs of the type **Multisensor AI**, also handling 0–20 mA transmitters.
  - 6 digital inputs of the type **Standard 24V DC DI**. Four of the inputs are supplied with advanced software functions for pulse counting etc
  - 2 digital outputs of the type **Standard 24V DC DO**.
- ❑ EP7416 is designed for use in general control applications.

## Electrical Specifications

### Power Supply

Supply voltage.....	24 V DC
tolerance.....	18–30 V DC
power consumption with max load.....	electronically fused to 1.1 A
power consumption with no load.....	80 mA
+C output for DI, level.....	= Supply voltage
max load.....	200 mA

### Internal Power Consumption

5 V.....	70 mA
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### Analog Outputs .....4

Basic resolution.....	11 bits
Output range.....	0 to 10 V
accuracy.....	±0.2 % ±20mV at max 1000 Ohms load
Max current on one output.....	20 mA, 10 V/500 Ohm
Max current on all outputs simultaneously.....	40 mA
Max current on all outputs simultaneously with 24V stabilized supply voltage.....	80 mA

### Analog Inputs .....4

Basic resolution.....	12 bits
Measurement range.....	individually configurable, determined by program parameters
Current.....	0 to 22 mA
input resistance.....	10 Ohm
current limit, active up to 12V, then transient protection is activated.....	24 mA
accuracy (% of value).....	±0,1 % ±20 uA
Temperature Ni1000, Pt1000.....	-50 to 150°C
accuracy (excluding sensor).....	±0.2°C
Temperature Pt100.....	-50 till 150°C
accuracy (excluding sensor).....	±0.3°C
Temperature Pt100, (extended range).....	0–600°C
accuracy.....	±0.6°C

Voltage.....	0 to 10 V, 0 to 200 mV
input resistance.....	10 MOhm
accuracy (% of full scale).....	±0.1 %
Resistance.....	0–2000 Ohm
accuracy.....	±3 Ohm
Conversion time.....	see software description
+C output for feeding of sensor, level.....	= Supply voltage
current limit, electronically fused.....	200 mA

<b>Digital Inputs</b> .....	6
Input 1–2.....	type Normal
Input 3–6.....	type Advanced

<b>Digital Outputs</b> .....	2
Maximum total continuous load on both outputs.....	800 mA

## Connections

See *General PIFA Specifications* on page 132 and its various sections for information on process connections.

All **AGnd** are internally linked to each other and to 24 Vminus (connection 15).

To attain maximum accuracy on analog input measurements and according to specifications, each respective **AGnd** should be used as a reference for each respective group of AI. As an example, the **AGnd**-connection 6 acts as an accurate reference for AI1 and AI2.

It is the same for analog outputs, where **AGnd-connection 26** should be used as reference for AO1-4.

Figure 84. Connections for EP7416.

