

# Analogue input module CPX-AP-I-4AI-U-I-RTD-M12

FESTO

Part number: 8086606



 General operating condition

## Data sheet

Feature	Value
Dimensions W x L x H	30 mm x 170 mm x 35 mm
Type of mounting	On H-rail with accessories With through-hole
Product weight	166 g
Ambient temperature	-20 °C ... 60 °C
Storage temperature	-40 °C ... 70 °C
Relative air humidity	5 - 95 % Non-condensing
Degree of protection	IP65 IP67
Note on degree of protection	Unused connections sealed
Corrosion resistance class (CRC)	1 - Low corrosion stress
Max. cable length	30 m inputs 50 m system communication
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom suitability, measured according to ISO 14644-14	Statically installed element, no meaningful evaluation possible according to ISO 14644-1
CE marking (see declaration of conformity)	As per EU EMC directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
KC characters	KC EMC
Certification	RCM compliance mark c UL us - Listed (OL)
Certificate issuing authority	UL E239998
Note on materials	RoHS-compliant
Housing material	PC Die-cast zinc, nickel-plated
Seals material	NBR
O-ring material	FPM
Diagnostics via LED	Diagnostics per module Status per channel
Diagnose per internal communication	Wire break Module error Short circuit/overload in sensor supply Parameter error Parameterization error Overload at analog inputs Upper limit value violated Underflow/overflow Lower limit value not complied with
Communication interface, function	System communication XF10 IN / XF20 OUT

Feature	Value
Communication interface, connection type	2x socket
Communication interface, connection technology	M8x1, D-coded as per EN 61076-2-114
Communication interface, number of pins/wires	4
Communication interface, protocol	AP
Communication interface, shielding	yes
Power supply, function	Incoming electronics/sensors and load
Power supply, type of connection	Plug
Power supply, connection technology	M8x1, A-coded as per EN 61076-2-104
Power supply, number of pins/wires	4
Voltage forwarding, function	Outgoing electronics/sensors and load
Voltage forwarding, connection type	Socket
Voltage forwarding, connection technology	M8x1, A-coded as per EN 61076-2-104
Voltage forwarding, number of pins/wires	4
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Nominal operating voltage DC for electronics/sensors	24 V
Permissible voltage fluctuations for electronics/sensors	± 25 %
Max. power supply	2 x 4 A (external fuse required)
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 38 mA
Power failure buffering	10 ms
Reverse polarity protection	yes
Electrical connection input, function	Analog input
Electrical connection input, connection type	4x socket
Electrical input connection, connection technology	M12x1 A-coded as per EN 61076-2-101
Electrical connection, input, note on connection technology	To achieve the technical specifications, the opposite side is shielded and must be designed with contact surfaces made from gold.
Electrical connection, input, number of pins/wires	5
No. of inputs	4
Fuse protection inputs (short circuit)	Internal electronic fuse per module
Max. residual current of inputs per module	1 A
Electrical isolation of inputs between channels	no
Digital inputs, electrical isolation of input - internal communication	yes
Measured variable	Voltage Current Temperature Resistor
Note on the measured variable	Temperature: PT100 and NI100 supported
Data format	15 bit + sign Linear scaling
Signal range	-10 - 10 V -5 - 5 V 0 - 10 V 1 - 5 V 0 - 20 mA 4 - 20 mA 0 - 500 Ω
Repetition accuracy	±0.025 % at 25 °C
Basic error limit at 25°C	±0.1 % for voltage ±0.1 % for electrical current ±0.4 % for temperature ±0.2 % for resistor
Operating error limit related to the ambient temperature range	±0.15 % for voltage ±0.15 % for electrical current ±0.9 % for temperature ±0.35 % for resistor