

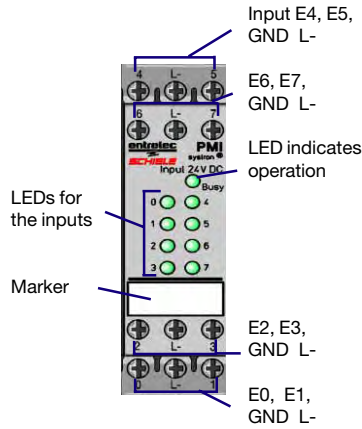
Process modules
Digital input PMI
for 24 V DC inputs
for 120 V AC inputs



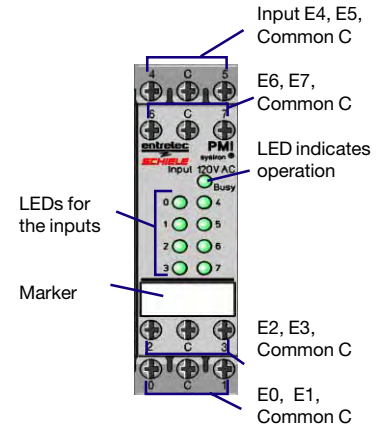
- 8 inputs 24 V DC or 120 V AC
- Electrical isolation in groups of 8
- Internal power consumption of 10 mA

■ Approvals:

PMI 24 V DC



PMI 120 V AC



PMI digital input modules

Digital input modules are used to process binary signals from limit switches, push buttons, and proximity switches and send these to the bus module via a ribbon cable. Signals are electrically isolated, momentary noise pulses are suppressed.

LEDs allow at-a-glance information on all states.

Inputs are designed for connection of single-wire cables. When used in conjunction with the terminal block, two- or three-wire cables can be connected.

Digital input modules	P/N:
PMI 24 V DC inputs	2 423 430 00
PMI 120 V AC inputs	2 423 431 00

Technical data

No. of inputs	8	
Electrical isolation	Optocoupler	
Supply voltage L+	24 V DC	120 V AC (47...63 Hz)
"0" signal	-5...+5 V	0...20 V AC
"1" signal	13...+30 V	79...132 V AC
Input current at 24 V DC / 120 V AC		
"0" signal	< 1 mA	
"1" signal	typ. 5.3 mA	typ. 8.3 mA at 50 Hz typ. 10 mA at 60 Hz
Delay time/ switching time		
"0" --> "1"	typ. 3 ms	typ. 10 ms
"1" --> "0"	typ. 6 ms	typ. 40 ms
Quadrature-axis comp. between L- terminals/ C terminals	1 A	1 A
Max. number of PMI per		
S 200/ S 250	6	
INTERBUS	6	
PROFIBUS-DP	6	
Schiele E/A-Bus	4	
Modbus	6	
CAN	6	
DeviceNet	6	
RS 232	6	
RS 485	6	
Addressing	automatic -> configuration	
Display of operating status		
Operating status	green Busy-LED = OK	
Switching state	green LED per input	
Data exchange		
INTERBUS/ PROFIBUS-DP	approx. 0.23 ms per module	
Schiele E/A-Bus	approx. 0.4 ms per module	
Power consumption		
internal	10 mA	
Dielectric withstand		
external <-> internal connection (PM)	acc. to VDE 0160: 500 V AC acc. to VDE 0110: 2.5 kV AC	
Ambient temperature		
Operating temperature	0 ... +55 °C	
Storage temperature	-25 ... +75 °C	
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)	
Degree of protection		
Terminals	IP 20	
Housing	IP 50	
Weight	.29 lb (130 g) 0.3 lb (140 g)	
Dimensions (W x H x D)	22.5 mm x 82.5 mm x 100 mm	

Process module digital output PMO transistor

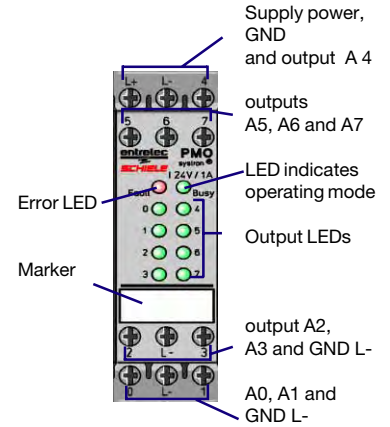


- 8 transistor outputs
- 24 V DC/ 1 A
- Total current max. 4 A, short-circuit and overload proof
- Electrically isolated in groups of 8
- Internal power consumption max. 40 mA, external 25 mA at 24 V DC + load

Operation

The digital output modules PMO are used to convert signals arriving by bus and bus module and to control actuators on site. The presence of external supply and short circuit/overload are monitored, displayed by LED, and passed on to the bus module. The outputs of the transistor module are short-circuit proof.

Design



■ Approvals:

Digital outputs module	P/N:
PMO Transistor	2 423 451 00

Technical data

Supply voltage L+	24 V DC
Voltage range including ripple	20...30 V including ripple
No. of outputs	8
Electrical isolation	Optocoupler
Output voltage at "1" signal	min. L+ -0.5 V
Output current at "1" signal	max. 1 A
Short-circuit and overload protection	electronic
Delay time/ switching time	
"0" --> "1"	typ. 35 µs
"1" --> "0"	typ. 600 µs
Max. total amount of current between L- terminals	4 A
Max. no. of PMO per	
S 200/ S 250	6
INTERBUS	6
PROFIBUS-DP	6
Schiele E/A-Bus	4
Modbus	6
CAN	6
DeviceNet	6
RS 232	6
RS 485	6
Addressing	automatic -> physical arrangement
Display of operational status	
Module status	green Busy-LED
Switching status	green LED per output
Data exchange	
INTERBUS/ PROFIBUS-DP	approx. 0.23 ms per module
Schiele E/A-Bus	approx. 0.4 ms per module
Power consumption	
internal	40 mA
external (at 24 V, without load)	max. 25 mA + 3.5 mA/ active output
Dielectric withstand	
external <-> internal connections (PM)	acc. to VDE 0160: 500 V AC
Ambient temperature	
Operating temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Degree of protection	
Terminals	IP 20
Housing	IP 50
Weight	0.35 lb (150 g)
Dimensions (W x H x D)	22.5 x 82.5 x 100 mm

Process module digital output PMO relay



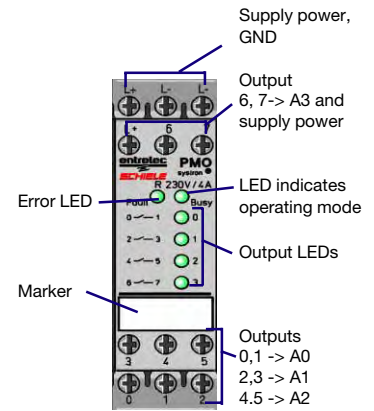
- 4 relay outputs 230 V AC/ 4 A
- Relay wired with varistor
- Leakage current max. 1 mA at 230 V
- Electrically isolated in groups of 1
- Internal power consumption 40 mA, external 50 mA at 24 V DC

Operation

The digital output modules PMO are used to convert signals arriving by bus and bus module and to control actuators on site. The presence of external supply and short-circuit/overload are monitored, displayed by LED, and passed on to the bus module.

■ Approvals:

Design



Digital outputs module	P/N:
PMO Relay	2 423 450 00

Technical data

Supply voltage L+	24 V DC
Voltage range including ripple	20...30 V DC including ripple
No. of outputs	4
Electrical isolation	Optocoupler/relay contacts
Delay time/ switching time	
"0" --> "1"	typ. 7 ms
"1" --> "0"	typ. 30 ms
Output current at "1" signal	
Resistive load (AC1)	230 V AC/ 4 A
Inductive load (AC11)	230 V AC/ 1.5 A
Short-circuit and overload protection	no
Max. total amount of current between L- terminals	1 A
Max. no of PMO per	
S 200/ S 250	6
INTERBUS	6
PROFIBUS-DP	6
Schiele E/A-Bus	6
Modbus	6
CAN	6
DeviceNet	6
RS 232	6
RS 485	6
Addressing	automatic -> physical arrangement
Display of operational status	
Module status	green Busy-LED
Switching status	green LED per output
Data exchange	
INTERBUS/ PROFIBUS-DP	approx. 0.23 ms per module
Schiele E/A-Bus	approx. 0.4 ms per module
Power consumption	
internal	max. 40 mA
external (at 24 V, without load)	max. 5 mA + 11 mA per active output
Dielectric withstand	
external <-> internal connections (PM)	acc. to VDE 0160 , 500 V AC
Noise immunity check acc. to IEC 801-4	Stage 3, 2 kV
Degree of protection	
Terminals	IP 20
Housing	IP 50
Ambient temperature	
Operating temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Weight	0.37 lb (170 g)
Dimensions (W x H x D)	22.5 x 82.5 x 100 mm

systron® PM Digital Output module PMO AC



- 8 Triac Outputs, 120/230 V AC, 0.3A, 50/60 Hz
- Electrical isolation : Optocoupler (2.5 kV AC)
- Internal fuse
- Zero crossing detection
- Suitable for all SCHIELE PM Process Modules

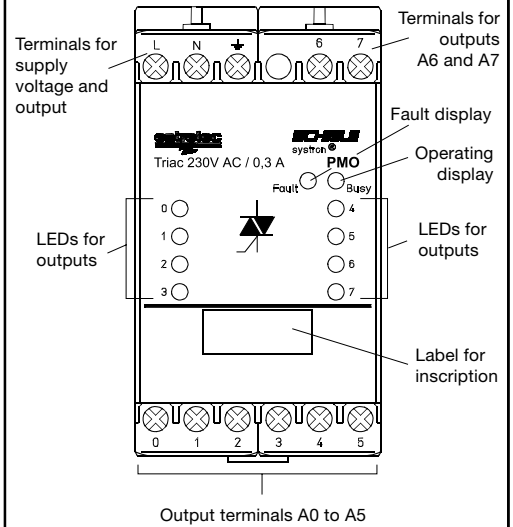
Operation

The digital output module PMO AC is used to convert signals arriving by bus and bus module and to control actuators on site. The presence of an external supply and fault behavior is monitored and displayed on the module. The outputs are protected with an internal fuse. Zero Crossing Detection is used on the output Triac command.

Approvals:

Type	P/N:
Digital output module PMO AC	2 423 452 00

Design



Technical data

Power supplies	
Supply voltage	90 ... 260 V AC (47...63Hz)
Outputs	
Number	8
Electrical isolation	optocouplers
Total Output current per module	
Rated value (up to 55°C) and (up to 45°C)	max. 2.4 A and max. 3.2 A
Output current per channel	
Rated value (up to 45°C)	max. 0.4 A (max. 0.3 A 45°C to 55°C)
For inductive load acc. To IEC 947-5-1 AC14	max. 0.3 A
Motor starter size	NEMA 4 (corresponding to Entelec DL65N and DL90N)
Parallel operation of 2 outputs	
For redundant load switching / to increase load capacity	Two outputs can be paralled/without an increase in load capacity
Leakage current	max. 1 mA
Protection against total current	Internal fuse
Protection against short-circuit	None
Delay times of outputs	
Switching time	max. 11 msec. at 50 Hz, max. 9 msec. at 60 Hz
Zero Crossing Detection	Yes
Status indication	
Module Status	green Busy LED
Switching state	1 green LED per output
Fault condition	1 red LED (absence or too low voltage)
EMC Behavior	
ESD / Burst	EN 61000-4-2 Level 3 (6/8kV) / EN 61000-4-4 Level 3 (1 kV)
Interference supression degree	EN 55022, Class B
Data exchange	approx. 0.5 ms per module
Power consumption	
Internal (derived from PM)	max. 25 mA
External (120 VAC 60 Hz, no load) / (230 VAC 50 Hz, no load)	max. 20 mA / max. 14 mA
Other characteristics	
Voltage withstand:	
Extern. Connections L, N, 0...7 against internal acc. VDE 0160	2,5 kV
Operating temperature	0°C to +55°C
Storage temperature	-25°C to + 75°C
Degree of protection	IP 20 / IP 50
Terminals, screw	14 AWG (2.5 mm ²), stranded, 12 AWG (4 mm ²), solid
Weight	0.49 lb (0.22 kg)
Dimensions (WxHxD)	45 x 82.5 x 100 mm

Maximum configuration

per PMO Device output module

- 6 CPU S200 / S250 / S250c
- 6 Bus module CANOpen
- 6 Bus module DeviceNet
- 6 Bus module Interbus
- 6 Bus module Modbus
- 6 Bus module Profibus DP
- 6 Bus module Schiele I/O bus
- 4 Bus module RS232 / RS485

Process module analog input PMAI 10 V/ 20 mA

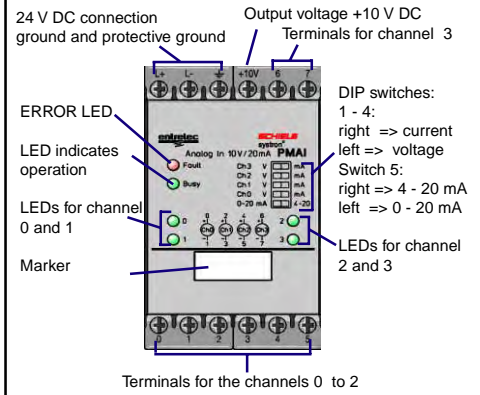


- 4 channels, 12 bit resolution
- Selectable: 0 ... 10V, 0 ... 20 mA or 4 ... 20 mA
- Electrical isolation between CPU and external supply
- Internal power consumption 80 mA, external 60 mA at 24 V DC

Operation

This analog input module converts signals directly on site and transfers them via ribbon cable to the bus module.
Interference-prone transmission of analog values over long distances thus become unnecessary.

Design



■ Approvals:

Analog input modules systron® PM	P/N:
PMAI 10 V/ 20 mA	2 423 435 00

Technical data

Supply voltage	24 V DC
Voltage range	20...30 V DC including ripple (max. 3 V)
Reverse-polarity protection	Diode
Number of inputs	4
Electrical isolation	CPU <-> analog part, external supply <-> analog parts, not inputs <-> inputs
Input range	selectable: 0...10 V or 0/ 4...20 mA per channel
Resolution	12 Bit
Conversion time	0.7 ms per channel
Input resistance	
Voltage range	> 100 kOhm
Current range	< 230 Ohm
Accuracy 10 V	± (0.4 % of measuring value + 4 D) at 25 °C
Accuracy 20 mA	± (0.3 % of measuring value + 4 D) at 25 °C
Temperature drift	max. 100 ppm/ K
Permissible input current at current input	max. ± 45 mA
Overvoltage protection	
Current input	max. ± 30 V against GND
Voltage input	max. ± 10 V
Number representation	
Complement-on-two	INTERBUS, PROFIBUS-DP, MODBUS, E/A- BUS S 800 DEVICENET
Sign + amount	CAN, E/A- BUS S 400
Power consumption	
internal (from PM)	80 mA
external (24 V, no load)	50 mA
Cable length, shielded	10 m
Max. number of PMAI per	
S 200/ S 250	6
INTERBUS	1
PROFIBUS-DP	5
Schiele E/A-Bus	4
Modbus	6
CAN	4
DeviceNet	5
RS 232/ RS 485	6
Addressing	automatic -> physical arrangement
Data exchange	approx. 1.6 ms per module
Display of operational status	
Status of input	green LED per module, intensity depending on signal
Error message	red Fault LED in case of Vv missing or overload
Dielectric withstand	acc. to VDE 0160: 500 V AC
Noise immunity check	acc. to IEC 801- 4 stage 3, 2 kV
Operating temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Weight	0.66 lb (300 g)
Dimensions (W x H x D)	45 mm x 82.5 mm x 100 mm

Process module analog input PMAI PT100 -70...220°C/ 0...100°C



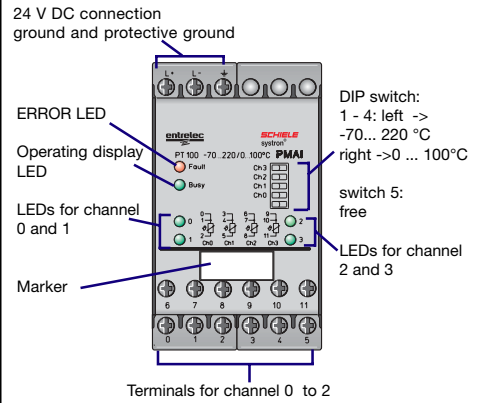
- 4 channels Pt100, 2/3 wire connection,
- Selectable: -70...220°C / 0...100°C
- External supply 24 V DC/ 80 mA required
- Internal power consumption 80 mA, external 60 mA at 24 V DC

Operation

Converts measuring values of up to 4 temperature sensors PT100.
The unit also offers the following functions:

- Linearizing of values
- Check on wire cracks
- Measuring error compensation

Design



■ Approvals:

Analog input modules	P/N:
PMAI Pt100 -70...220/0...100°C	2 423 436 00

Technical data

Supply voltage	24 V DC
Voltage range	20...30 V DC including ripple (max. 3 V)
Reverse polarity protection	Diode
Number of inputs	4
Electrical isolation	Optocoupler
Input range	selectable -70°C ... +220°C or 0°C ... +100°C /channel
Conversion principle	successive approximation
Measuring principle	PT100 3-wire
Resolution	-70°C ... 220°C: 0.3 K / 0°C ... 100°C: 0.1 K
Conversion time	10 ms per channel
Supply current	2.5125 mA
Input resistance	> 1 MOhm
Accuracy	± (0.2 % of measuring value) at 25°C
Temperature drift	max. 100 ppm/ K
Overvoltage protection	max. -15 V DC... +24 V DC against GND
Number representation	
Complement-on-two	INTERBUS, PROFIBUS-DP, MODBUS, E/A-BUS S 800 DEVICENET
Sign + amount	CAN, E/A-BUS S 400
Power consumption	
internal (from PM)	80 mA
external (24 V, no load)	70 mA
Cable length shielded	Cable resistance: max. 5 Ω per wire
Max. number of PMAI per	
S 200/ S 250	6
INTERBUS	1
PROFIBUS-DP	5
Schiele E/A-Bus	4
Modbus	6
CAN	4
DeviceNet	5
RS 232/ RS 485	6
Addressing	automatic -> physical arrangement
Data exchange	approx. 1.6 ms per module
Display of operational status	
Input status	green LED per input, intensity signal-dependent
Error message	red Fault LED if Vv fails
Dielectric withstand	acc. to VDE 0160: 500 V AC
Noise immunity test	acc. to IEC 801-5
Ambient temperature	
Operating temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Weight	0.55 lb (250 g)
Dimensions (W x H x D)	45 mm x 82.5 mm x 100 mm

Process module analog input PMAI PT100 -70...220°C/ 0...50mV



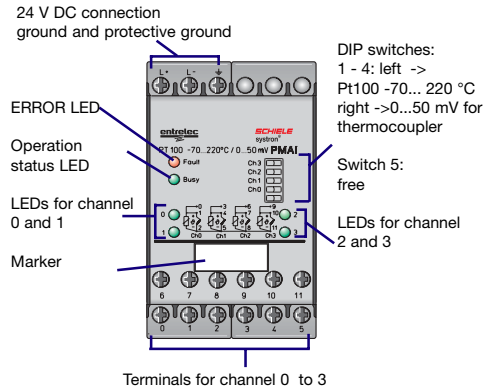
- 4 channels Pt100, 2/3-wire connection,
- Selectable: -70...220°C/ 0...50 mV
- External supply 24 V DC/ 80 mA required
- Internal power supply 80 mA, external 60 mA at 24 V DC

Operation

Process module analog input for PT100 connection. Converts input signals of a PT100 sensor into digital signals and transfers them to the bus module, interface module, or CPU by a ribbon cable.

■ Approvals:

Design



Analog input modules	P/N:
PMAI Pt100 -70...220°C/0...50mV	2 423 437 00

Technical data

Supply voltage	24 V DC
Voltage range	20...30 V DC including ripple (max. 3 V)
Reverse polarity protection	Diode
Number of inputs	4
Electrical isolation	Optocoupler
Input range	selectable -70°C ... +220°C or thermocoupler
Conversion principle	successive approximation
Measuring principle	PT100 3-wire
Resolution	-70°C ... 220°C: 0,3 K / 0...50 mV: 12.2 mV
Conversion time	20 ms per channel
Supply current	2.5125 mA
Input resistance	> 1 MOhm
Amplification error	Pt100: ± 0.1 % / 0...50 mV: ± 0.3 %
Offset error	Pt100: ± 5 Digits / 0...50 mV: ± 10 Digits
Temperature drift	max. 100 ppm/ K
Overvoltage protection	max. - 15 V DC...+24 V DC against GND
Number representation	
Complement-on-two	INTERBUS, PROFIBUS-DP, MODBUS, E/A-BUS S 800 DEVICENET
Sign + amount	CAN, E/A-BUS S 400
Power consumption	
internal (from PM)	80 mA
external (24 V, no load)	60 mA
Cable length shielded	10 m
voltage input	Cable resistance: max. 5 Ω per wire
Pt 100 input	
Max. number of PMAI per	
S 200/ S 250	6
INTERBUS	1
PROFIBUS-DP	5
Schiele E/A-Bus	6
Modbus	6
CAN	4
DeviceNet	5
RS 232/ RS 485	6
Addressing	automatic -> physical arrangement
Data exchange	approx. 1.6 ms per module
Display of operational status	
Input status	green LED per input, intensity signal-dependent
Error message	red Fault LED if Vv fails
Dielectric withstand	acc. to VDE 0160: 500 V AC
Noise immunity test	acc. to IEC 801-5
Operating temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Weight	0.55 lb (250 g)
Dimensions (W x H x D)	45 mm x 82.5 mm x 100 mm

Process module analog input
PMAI PT100 0...330°C/0...10V

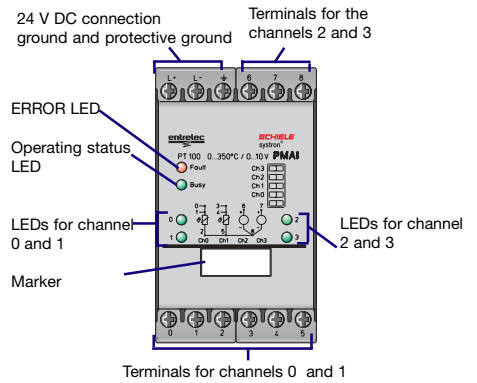


- 2 channels Pt100, 2/3-wire connection, 2 channels 0...10 V
- External supply 24 V DC/ 80 mA required
- Internal power consumption 80 mA, external 60 mA at 24 V DC

Operation

This analog module offers two channels for PT100 temperature sensors and two further channels for analog input signals in 0...10 V range.

Design



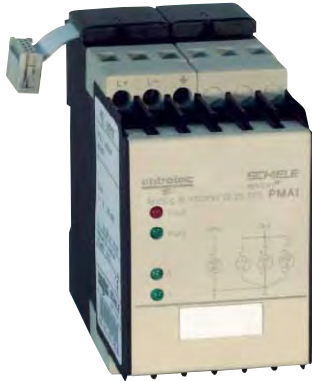
■ Approvals:

Analog input modules	P/N:
PMAI Pt100 0...330°C/0...10V	2 423 438 00

Technical data

Supply voltage	24 V DC
Voltage range	20...30 V DC including ripple (max. 3 V)
Reverse polarity protection	Diode
Number of inputs	4
Electrical isolation	Optocoupler
Input range	channel 0,1: 0°C ... +330°C, channel 2,3: voltage 0...10 V
Conversion principle	successive approximation
Measuring principle	PT100 3-wire
Resolution	0°C ... 330°C: 0.3 K / 0...10 V: 2.44 mV
Conversion time	20 ms per channel
Supply current	2.5125 mA
Input resistance channel 2/3	> 100 kOhm
Amplification error	Pt100: ± 0.1 % / 0...10 V: ± 0.4 %
Offset error	Pt100: ± 2 Digits / 0...10 V: ± 4 Digits
Temperature drift	max. 100 ppm/ K
Overvoltage protection	max. - 15 V DC...+24 V DC against GND
Number representation	
Complement-on-two	INTERBUS, PROFIBUS-DP, MODBUS, E/A- Bus S 800 DEVICENET
Sign + amount	CAN, E/A-Bus S 400
Power consumption	
internal (from PM)	80 mA
external (24 V, no load)	60 mA
Cable length shielded	10 m
	Pt 100 input
	Cable resistance: max. 5 Ω per wire
Max. number of PMAI per	
S 200/ S 250	6
INTERBUS	1
PROFIBUS-DP	5
Schiele E/A-Bus	4
Modbus	6
CAN	4
DeviceNet	5
RS 232/ RS 485	6
Addressing	automatic -> physical arrangement
Data exchange	approx. 1.6 ms per module
Display of operational status	
Input status	green LED per input, intensity signal-dependent
Error message	red Fault LED if Vv fails
Dielectric withstand	acc. to VDE 0160: 500 V AC
Noise immunity test	acc. to IEC 801-5
Ambient temperature	
Operating temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Weight	0.55 lb (250 g)
Dimensions (W x H x D)	45 mm x 82.5 mm x 100 mm



Process module analog input PMAI 60 mV/ 10,20,50 V



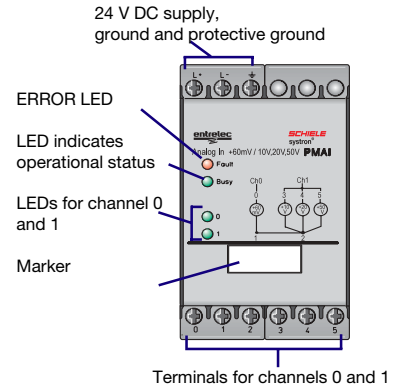
- 1 channel, 0...60 mV
- 1 channel 0 ... 10, 20 or 50 V
- electrical isolation between CPU and external supply
- power consumption 80 mA internal (E-Bus), external supply: 80 mA at 24 V DC

Operation

This analog module was developed to measure and monitor load status of a battery.

■ Approvals:  

Design



Analog input modules	P/N
PMAI 60 mV/ 10, 20, 50 V	2 423 439 00

Technical data

Supply voltage		24 V DC
Voltage range		20...30 V DC including ripple (max. 3 V)
Reverse polarity protection		Diode
Number of inputs		2
Resolution		12 Bit
Conversion time		15 ms per channel
Cable length, shielded		10 m
Input resistance		
	0 ... 60 mV	30 kΩ
	0...10 V input	100 kΩ
	0...20 V input	200 kΩ
	0...50 V input	500 kΩ
Offset error		± 8 digits
Error limitation		± 0.4 of the measured value
Conversion principle		successive approximation
Overvoltage protection	0	max. ± 50 V against GND
	1	max. ± 80 V against GND
Electrical isolation		yes, CPU <-> analog circuit, external supply <-> analog circuit, not inputs <-> inputs
Power consumption	internal (PM)	80 mA
	external (24 V)	80 mA
Number representation		
Complement-on-two		INTERBUS, PROFIBUS-DP, MODBUS, E/A-Bus S 800 DEVICENET
Sign + amount		CAN, E/A-Bus S 400
Max. number of PMAI per		
S 200/ S 250(c)		6
INTERBUS		1
PROFIBUS-DP		5
Schiele E/A-Bus		4
Modbus		6
CAN		4
DeviceNet		5
RS 232/ RS 485		6
Addressing		automatic -> physical arrangement
Data exchange		approx. 1.6 ms per module
Display of operational status		
Input status		green LED per module, intensity depending on signal
Error messages		red Fault LED if Vv missing
Dielectric withstand		according to VDE 0160: 500 V AC
Noise immunity test		according to IEC 801- 4 stage 3, 2 kV
Ambient temperature		
Operating temperature		0 ... +55 °C
Storage temperature		-25 ... +75 °C
Terminals, screw		max. 2 x 14 AWG (2 x 2.5 mm²)
Weight		0.66 lb (300 g)
Dimensions (W x H x D)		45 mm x 82.5 mm x 100 mm

Process module analog output PMAO

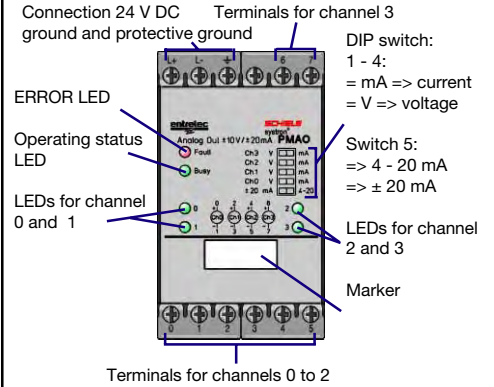


- 4 channels, resolution 12 Bit
- Ranges ± 10 V, ± 20 mA, 4...20 mA settable
- Electrical isolation between CPU and internal supply
- Internal power consumption 80 mA, external 70 mA at 24 V DC + load

Operation

The PMAO module converts digital values into analog values and transfers them to the corresponding channel. Each of these channels can be set to one of three possible ranges.

Design



■ Approvals:

Analog output modules	P/N:
PMAO	2 423 455 00

Technical data

Supply voltage	24 V DC
Voltage range	20...30 V DC including ripple
Reverse polarity protection	Diode
Number of outputs	4
Electrical isolation	CPU <-> analog part, external supply <-> Analog, not outputs <-> outputs
Output ranges	selectable ±10 V, ± 20 mA or 4 ... 20 mA per channel
Resolution	12 Bit (11 Bit + sign)
Conversion rate	1 ms per channel
Accuracy	< 0.7 %
Voltage output	Load ≥ 2 KOhm f. Ia ≤ 5 mA, short-circuit proof
Current output	Load 50 - 500 Ohm, no-load proof
Value representation	
Complement-on-two	INTERBUS, PROFIBUS-DP, MODBUS, E/A-Bus S 800 DEVICENET
Sign + amount	CAN, E/A-Bus S 400
Power consumption	
internal (from PM)	80 mA
external (24 V, no load)	70 mA without load, 180 mA maximum
Cable length, shielded	max. 10 m
Max. number of PMAO per	
S 200/ S 250	6
INTERBUS	1
PROFIBUS-DP	5
Schiele E/A-Bus	4
Modbus	6
CAN	4
DeviceNet	5
RS 232/ RS 485	6
Addressing	automatic -> physical arrangement
Data exchange per module	INTERBUS: 1.3 ms , PROFIBUS-DP: 1.6 ms
Display of operational status	
Output status	green LED per output
Error message	red Fault LED, if Vv fails
Dielectric withstand	acc. to VDE 0160, 500 V AC
Noise immunity check	acc. to IEC 801-4, stage 3, 2 kV
Vibration and shock tests	acc. to IEC68-2-6
Degree of protection	
Terminals	IP 20
Housing	IP 50
Ambient temperature	
Operation temperature	0 ... +55 °C
Storage temperature	-25 ... +75 °C
Terminals, screw	max. 2 x 14 AWG (2 x 2.5 mm ²)
Weight	0.48 lb (220 g)
Dimensions (W x H x D)	45 mm x 82.5 mm x 100 mm