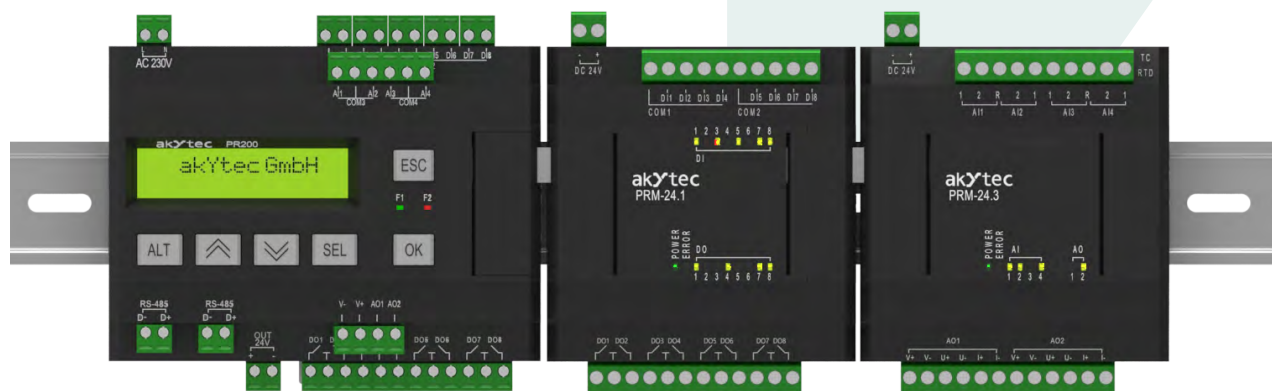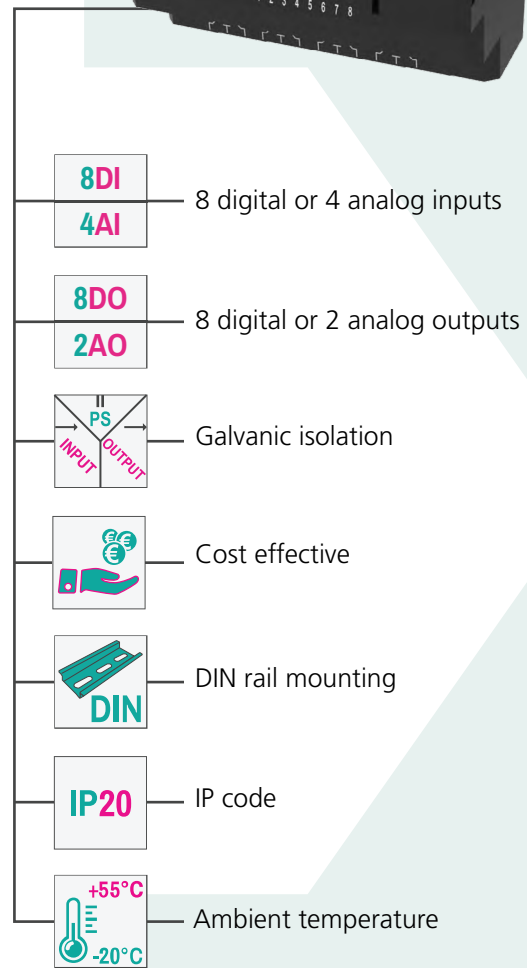# PRM

Analog Extension Module

Extension module

PRM provides the quickest and the most conven-ient, as regards installation and configuration, digi-tal or analog I/O extension for the PR200 Program-mable Relay from akYtec.

This module connects to the PR200 base unit di-rectly over the internal bus, which ensures much faster and reliable communication as compared to RS485/Modbus. Moreover, the communication over the internal bus requires no additional I/O con-figuration as it is with Modbus registers.

Functions and features:

- Independent power supply (24V DC or 230V AC on option)
- The same high-speed performance as that of the PR200 base unit
- Easy connection, removal and replacement
- Galvanic isolation between power supply and I/O groups

Standard variants	Description	Enclosure
PRM-230.1	230 V AC voltage, 8 DI and 8 DO relay	DIN rail / wall 80 x 108 x 58 mm
PRM-24.1	24 V DC voltage, 8 DI and 8 DO relay	
PRM-230.3	230 V AC voltage, 4 AI and 2 AO	
PRM-24.3	24 V DC voltage, 4 AI and 2 AO	

8DI / 4AI — 8 digital or 4 analog inputs

8DO / 2AO — 8 digital or 2 analog outputs

PS — Galvanic isolation

Cost effective

DIN — DIN rail mounting

IP20 — IP code

+55°C / -20°C — Ambient temperature

PRM
Analog Extension Module

Technical Data:

		PRM-230.1		PRM-24.1
General				
Power supply		230 (90...264) V AC; 50 (47…63) Hz		24 (19...30) V DC
Power consumption, max.		8 VA		4 W
Mounting		DIN rail (switchboard / distribution box)		
Ambient temperature		-20...+55 °C		
IP code		IP20		
Dimensions		80 x 108 x 58 mm		
Weight		approx. 210 g		approx. 315 g
Digital inputs				
Quantity		8		
Type		Switch contact		switch contact, PNP with open collector
Logical states	1	159...264 V AC (0.75...1.5 mA)	1	15...30 V DC (5 mA)
	0	0...40 V AC (0...0.5 mA)	0	-3...+5 V DC (0...1 mA)
Galvanic isolation		in groups of 4		
Digital outputs				
Quantity		8		
Type		relay (NO)		
Galvanic isolation		in groups of 2		
Switching capacity	AC	5 A, 250 V (resistive load)		
	DC	3 A, 30 V		
Minimum load current		10 mA (at 5 V DC)		

		PRM-230.3		PRM-24.3
General				
Power supply		230 (90...264) V AC; 50 (47…63) Hz		24 (19...30) V DC
Power consumption, max.		8 VA		4 W
Mounting		DIN rail (switchboard / distribution box)		
Ambient temperature		-20...+55 °C		
IP code		IP20		
Dimensions		80 x 108 x 58 mm		
Weight		approx. 210 g		approx. 315 g
Analog inputs				
Quantity		4		
Type		TC, RTD, (0)4-20 mA, 0-1 V, -50-50 mV, 0 … 3950 Ω		
ADC resolution		16 bit		
Sampling time for one input, max.		0.6-0.8 s		
Accuracy	TC	5 %		
	RTD	0.25 %		
	I/U	0.25 %		
Analog input resistance, min.		10 kΩ		
Analog outputs				
Quantity		2		
Type		0-5 mA, 0-20 mA, 4-20 mA ,0-5 V ,0-10		
DAC resolution		12 bit		
Accuracy		± 0.5 %		
Temperature influence		± 0.25 %		
Galvanic isolation between outputs		2830 V		
Voltage supply (external, each output)		15-30 V DC		
Accuracy		± 0.5 %		
Output load (max.)		1000 Ω (0-5 mA, 0-20 mA, 4-20 mA) 300 Ω (0-5 V, 0-10 V)		

akYtec