

◆ **Technical Data:**

Model: PR-22AD-PTDAI-RA

GENERAL SPECIFICATIONS

Timers: 1024

Counters: 1024

Function Blocks: 1024

Operation temp.: -20°C - 55°C

Storage: -40°C - 70°C

Protection: IP20 (Non-waterproof)

RTC accuracy : MAX ±2S/day

RTC Backup at 25 °C: 20 days

Program and settings Backup: 10 years

Data Power-off retentivity: 10 years

Modify parameters via keypad LCD: yes

Dimensions: 133*90*60 (Unit: mm)

Certificate: CE

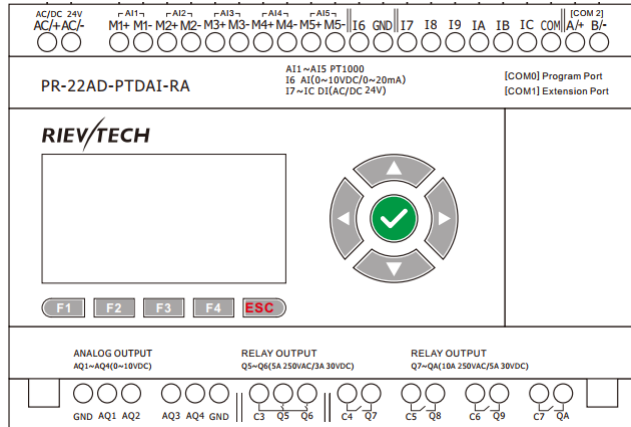
Installation: 35-DIN rail or screw for installation

Expansion capacity: 16 modules (PR-E-16)

Password protection: 4-digit number password protection or disable program upload function

Communication interface: 1 RS232 Port (COM0) & 1 RS485 port (COM1 external) available via optional accessory, 1 built-in RS485 (COM2)

Communication protocol: Modbus RTU/ASCII



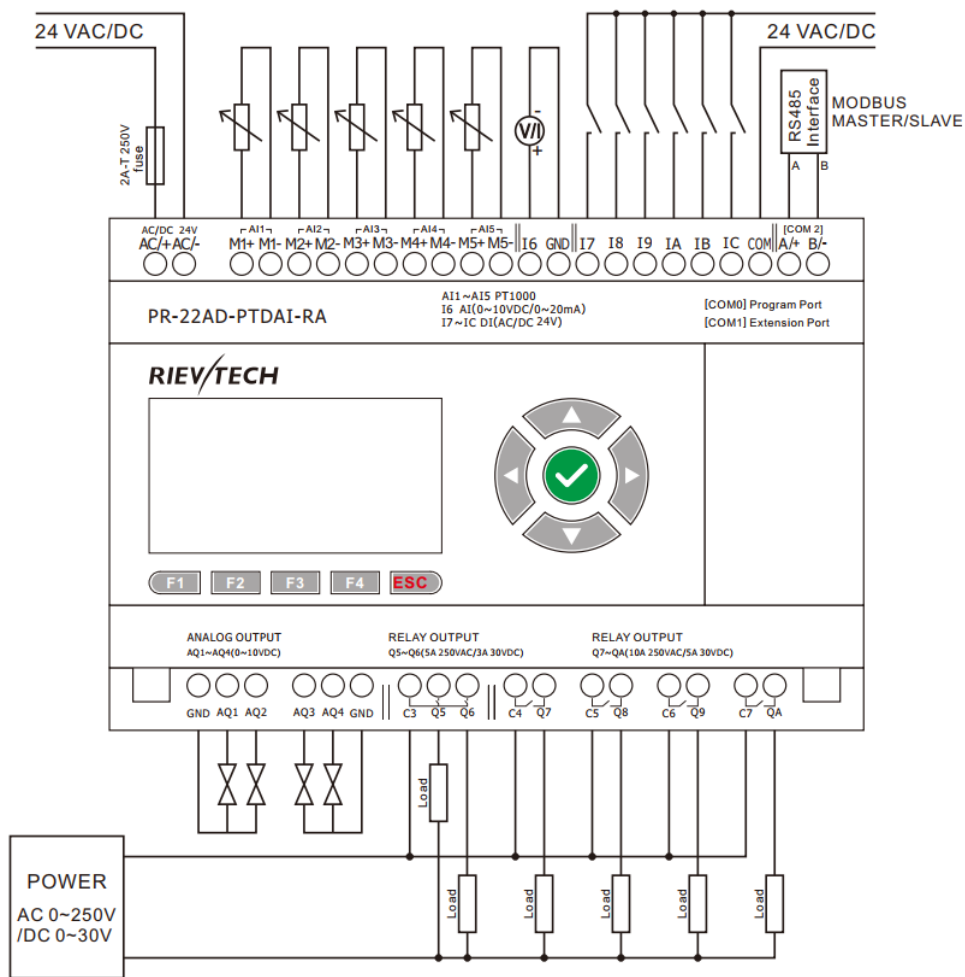
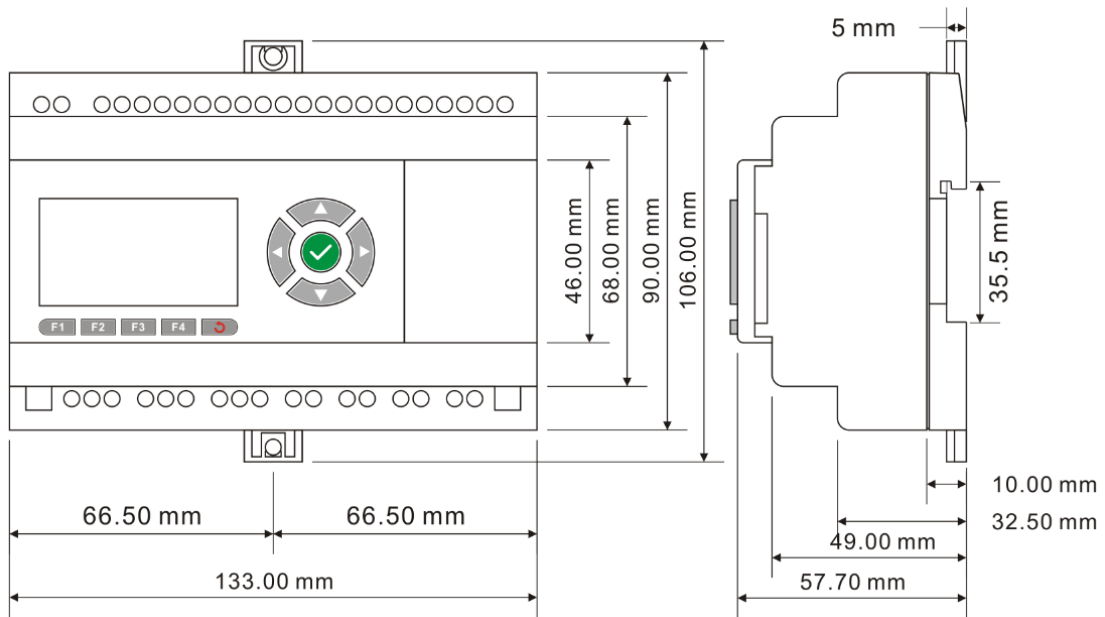
Technical Index

Power supply:	
Nominal voltage (not insulated)	AC/DC 24V
Operating limits	AC 24V; DC 22-28V
Immunity from micro power cuts	Typ. 300ms
Input parameters:	
Input No	12 (AI1-AI6, I7 - IC)
Digital input	6 (I7-IC)
Analogue input	5 PT1000(-50...200°C) + 1(I6)(0...20mA OR 0...10V DC)
PT1000 inputs (AI1-AI5)	
Analog input	5 channels PT1000 (AI1--AI5)
Resolution	0.3°C
Measuring range	-50°C to +200°C
Cable length	10m max. shielded and twisted
Digital input (I7-IC)	
Input voltage	24 VAC/DC, 50/60 Hz opto-isolated

Number of high-speed inputs	0
COM	common digital inputs
Isolation between power supply and inputs	None
Isolation between inputs	None
Analog inputs I6	
Voltage (0..10V)	
Measurement range	DC 0---10V
Input impedance	Min, 24K Ω ; Max. 72K Ω
Input voltage	28.8 V DC max
Resolution	10bit ,0.01V
Accuracy at 25 °C	\pm (Max.0.02)V
Accuracy at 55 °C	\pm (Max.0.04)V
Isolation between analog channel and power supply	None
Cable length	10 m max. shielded and twisted
Analog inputs I6	
Current (0..20mA)	
Analog signal	0/4....20mA current
Input impedance	260 Ω
Resolution	0.02mA
Accuracy at 25 °C	0.05mA
Cycle time for analog value generation	Typ. 300 ms
Protection against polarity inversions	yes
Overvoltage protection	Yes, if the input voltage is >6.5V, this one is automatically switched on 0--10V configuration
Isolation between power supply and inputs	No
Cable length	<=30M with shielded twisted cable(sensor not isolated)
Output	
Analog output(0...10V): AQ1--AQ4	
Output No	4 AQ1-AQ4
Output signal	DC 0...10V
Internal value and signal relationship	AQ1/AQ2/AQ3/AQ4(0..1000)= V1(0...10V)
Resolution	0.01V
Accuracy at 25 °C	0.02V
5A Relay 2 outputs from Q5 , Q6	
Max. breaking voltage	CE:AC 250 V/DC 30 V 5A UL:AC 250 V/DC 30 V 3A
Electrical durability Expectancy	10 ⁵ Operations at Rated Resistive Load
Mechanical life	10 ⁷ Operations at No Load condition
Response time	Operate Time: 15 mSec. Max. Release Time: 10 mSec. Max.
Built-in protections	Against short-circuits: None

	Against overvoltages and overloads: None
10A Relay 4 outputs from Q7 to QA	
Max. breaking voltage	CE:AC 250 V/DC 30 V 10A UL:AC 250 V/DC 28 V 5A
Max. Allowable Power Force	1250VA
Electrical durability Expectancy	10 ⁵ Operations at Rated Resistive Load
Mechanical life	10 ⁷ Operations at No Load condition
Response time	Operate Time: 15 mSec. Max. Release Time: 10 mSec. Max.
Built-in protections	Against short-circuits: None Against overvoltages and overloads: None
Communication ports parameters:	
COM0_TTL port	Can be used as program port with PR-RS232&PR-USB; Also can be convert to RS232 port with PR-RS232 Can be convert to RS485 port with PRO-RS485 Note:Need move away the expand cover to use it Can be used as modbus master or slave
Built-in RS485 COM2	1 built-in RS485 port (Terminal A+,B-) Can be used as modbus master or slave or BACNET MSTP
Ext RS485 COM1	Need use with PR-E-RS485 module Can be used as modbus master or slave
Other parameter	
Weight	Approx.400g

Installation Dimensions & Wiring Dimensions



Program(xlogicsoft) Specification

SYSTEM							
Operating System requirements		Windows /2000/XP/WIN7/WIN8		Function block		1024	
Programming languages		Function block		Execution Speed		<0.1ms per function	
Program Memory		1024		LCD Display		4 lines x 16 characters	
Functions		Up to 70 function blocks					
BASIC	Timers					a.On-delay; b.Off-delay etc. Up to 12 kind Timers	
	Maximum Number	1024					
	Timing Ranges	10ms--99 h59m					
	Counters					a.Up/down Counter b.Hours Counter c.Frequency Threshold Trigger	
	Maximum Number	1024					
	Highest Count	99999999					
	Resolution	1					
	RTC					a.Weekly Timer b.Yearly Timer	
	Number available	1024					
	Resolution	1 min					
	Time span available	Week/year-month-day-hour-min					
	Flags					a.Digital Flag b.Analog Flag	
	Digital flags	256					
	Analog flags	256					
	PI Functions					a.PI Controller	
	Number available	30					
	Parameter Ranges	1-32767					
	Analog Math					a.Analog Math b.Analog Math Error detection	
Number available	1024						
Function	ADD, Subtract,Multiply, Divide						
Analog Ramp Function					a. Analog Ramp		
Number available	55						
Compare Function							
Number available	1024				a.Analog compactor b.Comparison of 2 values		
Special Functions							
HMI Screens					a.Message texts		
Number available	128						
Display/Edit	Preset Current value and Free text						
PWM Functions					a.PWM		
Number available	1024						
Communication Functions					a.Modbus write b.Modbus read		
Number available	1024(Only CPU works as Master need these 2 blocks, slave does not need)						
Word/bit data Conversion	Square Boot	Sin/Cos	RS latch relay				
Data-logger Function	Analog watchdog	Analog filter	Average value				
Pumps Management	Defrost function	Multiplexer	Pulse Relay				

	Cam Control	Astronomical clock	Stop watch	Boolean function
Note: 1.Not all program functions are listed in this table i.e. AND,NAND,OR,NOT,NOR,XOR,SHIFT REGISTER,DATA LATCHING RELAY, COMPORT STATUS etc.				