

◆ **Technical Data:**

Model: PR-26DC-DAI-RA-N

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:

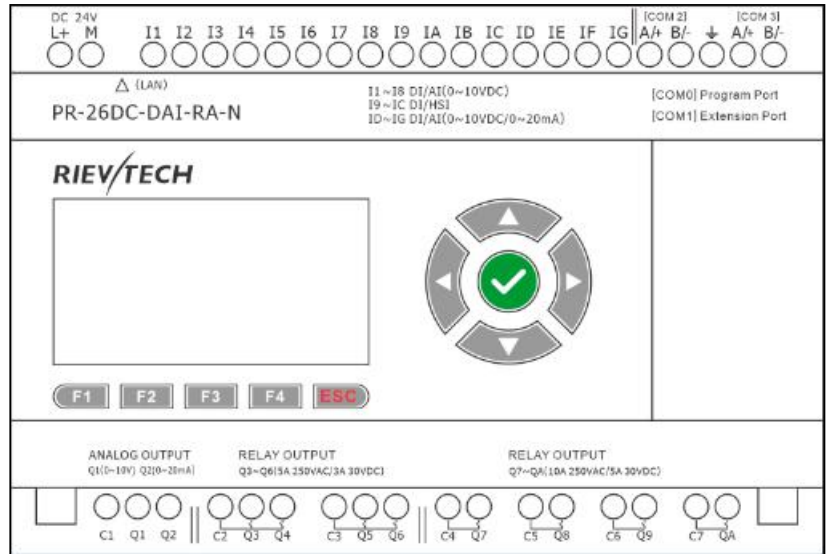
Installation: 35-DIN rail or screw for installation

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, 2 built-in RS485 (COM2, COM3), 1Ethernet port.

Communication protocol: Modbus RTU/ASCII, Modbus TCP / MQTT



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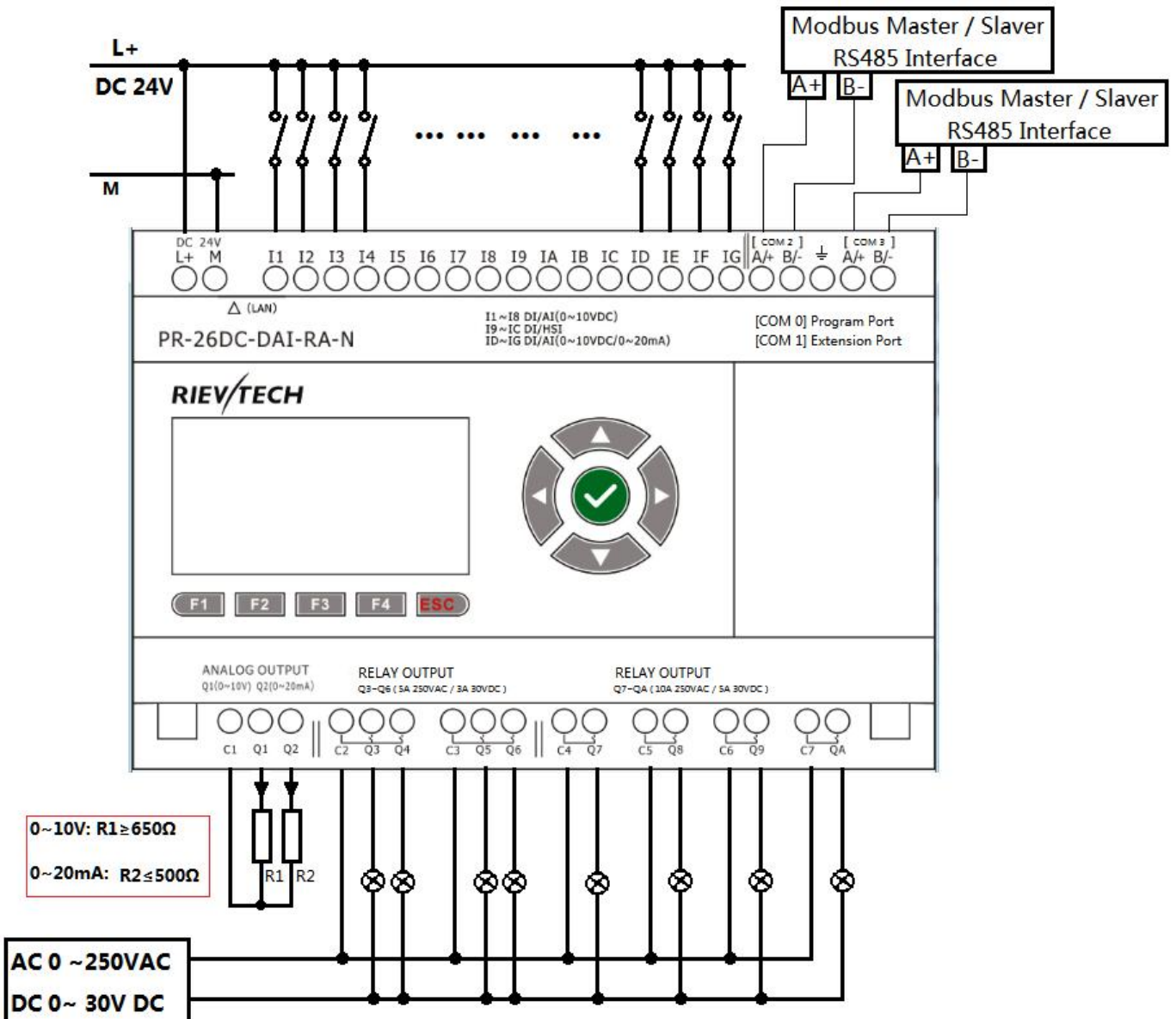
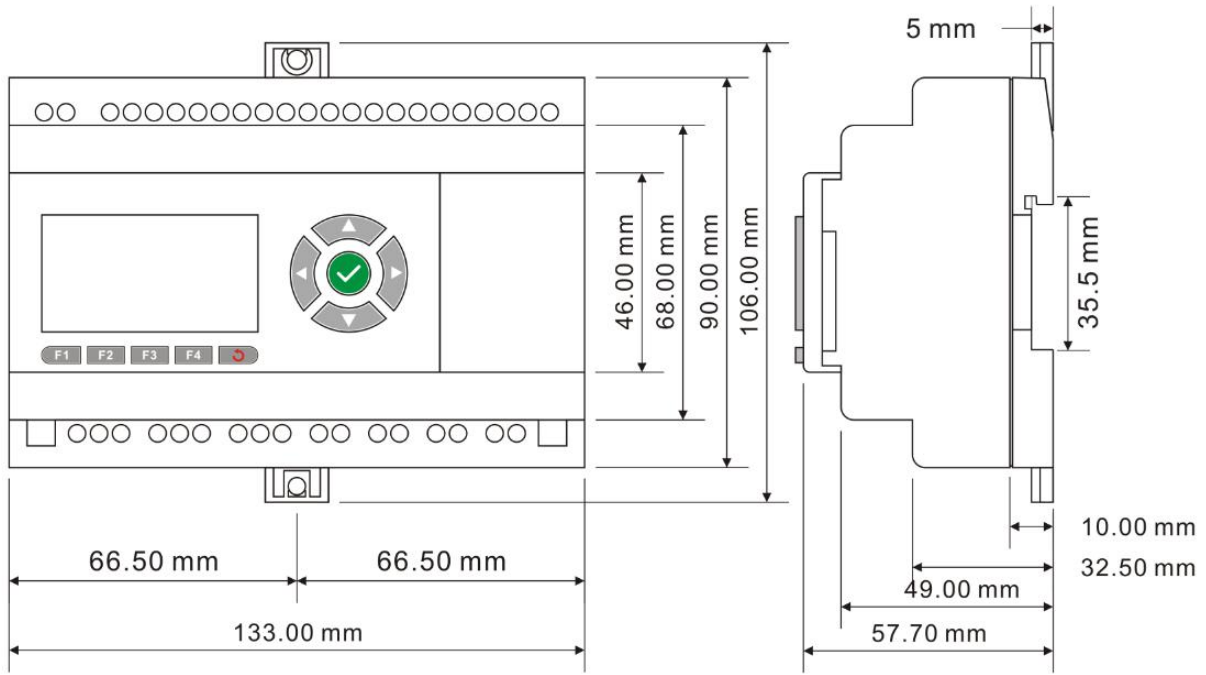
Power supply:	
Nominal voltage	DC 24V
Operating limits	DC 20.4-28.8V
Immunity from micro power cuts	Typ.5 ms
Max. Startup current	Max. 0.3A
Max. absorbed power	10W
Protection against polarity inversions	Yes
Input parameters:	
Input No	16 (I1-IG)
Digital input	16 (I1-IG)
Analogue input	8 (I1-I8)(0..10V DC) +4(ID-IG)(0...20mA OR 0..10V DC)
Digital input and analog inputs (0...10V)10bits(I1-I8)	
Inputs used as digital inputs(I1-I8)	
Input voltage	DC0-28.8V
Input signal0	< 5V DC;<0.08mA
Input signal1	> 8 V DC;>0.12mA
Input current	0.16mA @ 10.8V dc 0.18mA @ 12.0 V dc 0.34mA @ 24 V dc 0.41mA @ 28.8 V dc
Response time	0 to 1 : Typ. 10.5 ms ; 1 to 0 : Typ. 1.5 ms

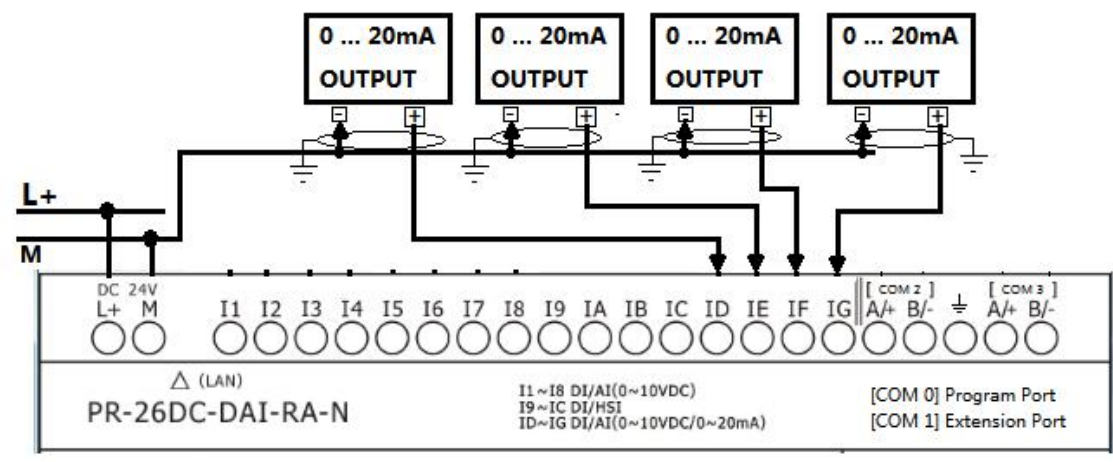
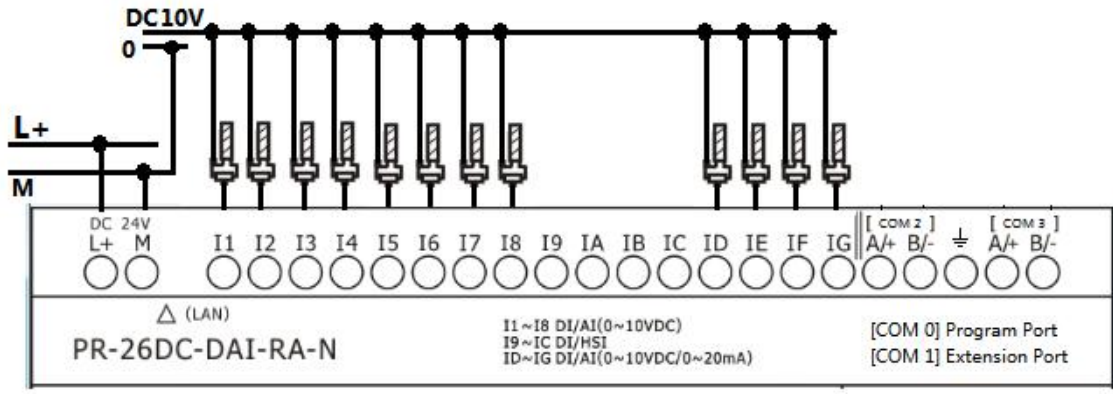
Maximum counting frequency	Typ.: 4 HZ
Sensor type	Contact or 3-wire PNP
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
Inputs used as analog inputs(0..10V)(I1-I8)	
Measurement range	DC 0---10V
Input impedance	Min, 24K Ω ; Max. 72K Ω
Input voltage	28.8 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
Digital and high speed inputs(I9--IC)	
Digital inputs(I9-IC)	
Input voltage	DC0-28.8V
Input signal0	< 5V DC; <1mA
Input signal1	> 8 V DC;>1.6mA
Input current	2.1mA @ 10.8V dc 2.3mA @ 12.0 V dc 4.6 mA @ 24 V dc 5.5 mA @ 28.8 V dc
Response time	0 to 1 : <1 ms ; 1 to 0 : <1 ms
High speed inputs(I9-IC)	
Maximum counting frequency	60kHz(I9--IC)
Digital and analog(0--10V)&analog(0...20mA)(ID-IG)	
Inputs used as digital inputs(ID-IG)	
Input voltage	DC0-28.8V
Input signal0	< 5V DC;<0.08mA
Input signal1	> 8 V DC;>0.12mA
Input current	0.16mA @ 10.8V dc 0.18mA @ 12.0 V dc 0.34mA @ 24 V dc 0.41mA @ 28.8 V dc
Response time	0 to 1 : Typ. 10.5 ms ; 1 to 0 : Typ. 1.5 ms
Maximum counting frequency	Typ.: 4 HZ
Sensor type	Contact or 3-wire PNP
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
Inputs used as analog inputs(0..10V)(ID-IG)	
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	± (Max.0.02)V
Accuracy at 55 °C	± (Max.0.04)V
Isolation between analog channel and power supply	None
Cable length	10 m max. shielded and twisted
Input signal0	< 5V DC;<0.08mA
Input signal1	> 8 V DC;>0.12mA
Input current	0.16mA @ 10.8V dc 0.18mA @ 12.0 V dc 0.34mA @ 24 V dc 0.41mA @ 28.8 V dc
Response time	0 to 1 : Typ. 10.5 ms ; 1 to 0 : Typ. 1.5 ms
Sensor type	Contact or 3-wire PNP
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
Inputs used as analog inputs(0..20mA)(ID-IG)	
Analogue signal	0/4....20mA current
Input impedance	260Ω
Resolution	0.02mA
Accuracy at 25 °C	0.05mA
Cycle time for analog value generation	Typ. 50 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 (2 Analog output + 8 Relay output)	
Analog output(0...10V)/Analog output(0...20mA):AQ1--AQ2(Can be switched for voltage or current output)	
Output No.	2 (AQ1:0~10V AQ2:0~20mA)
Output signal	C1-Q1: DC 0...10V
Internal value and signal relationship	(0..1000)=(0...10V)
Resolution	0.01V
Accuracy at 25 °C	0.02V
Output signal	C1-Q2: DC 0..20mA
Internal value and signal relationship	(0...1000)=(0...20mA)
Resolution	0.02mA
Accuracy at 25 °C	0.05mA
5A Relay 4 outputs from Q3 to 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
Built-in RS485 COM3	1 built-in RS485 port (Terminal A+,B-) Can be used as modbus master or slave
Ext RS485 COM1	Need use with PR-E-RS485 module Can be used as modbus master or slave
Ethernet port:	Built-In(10M/100M), 1.Can be used as program or communication 2.Can be used as modbus master or slave
Monitoring webserver page	Yes
Xlogic<--->Xlogic(by Ethernet)	1 xlogic works as tcp server can connect with 8 tcp client xlogics or other tcp devices.
Xlogic<--->Ethernet/Internet:	1 xlogic works as TCP clients can connect with 8 different tcp servers separately in maximum
Other parameter	
Weight	Approx.400g

Dimension and wiring





SYSTEM				Operating System requirements		Windows /2000/XP/WIN7/WIN8		Programming languages		Function block		Program Memory		1024		Execution Speed		<0.1ms per function		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																															
	Maximum Number		1024																													
	Highest Count		99999999																													
	Resolution		1																													
	RTC																															
	Number available		1024																													
	Resolution		1 min																													
	Time span available		Week/year-month-day-hour-min																													
	Flags																															
	Digital flags		256																													
	Analog flags		256																													
	PI Functions																															
	Number available		30																													
	Parameter Ranges		1-32767																													
	Analog Math																															
Number available		1024																														
Function		ADD, Subtract,Multiply, Divide																														
Analog Ramp Function																																
Number available		55																														
Compare Function																																
Number available		1024																														
Special Functions	HMI Screens																															
	Number available		128																													
	Display/Edit		Preset Current value and Free text																													
	PWM Functions																															
	Number available		1024, (2 fast output for Transistor)																													
	Communication Functions																															
	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																										
<p>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.</p>																																