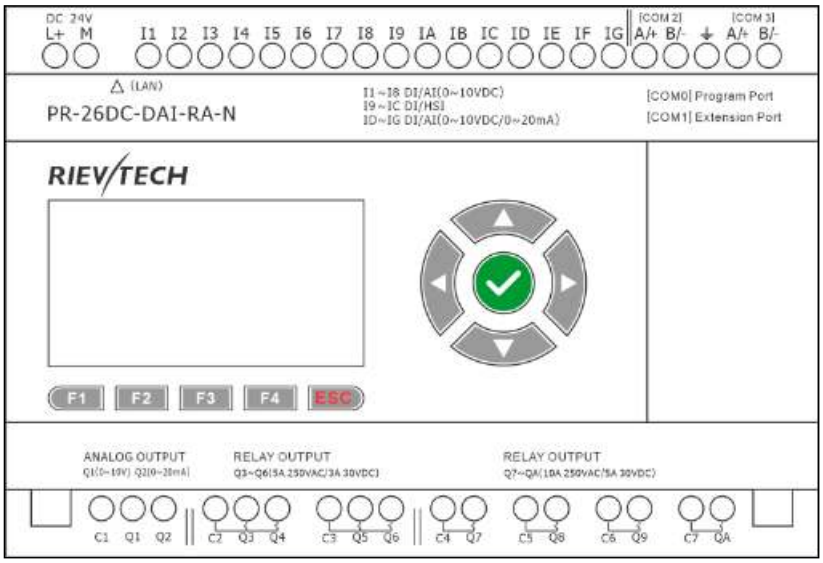
◆ **Technical Data:**

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 (C0M2, C0M3), 1Ethernet port.

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

Technical Index

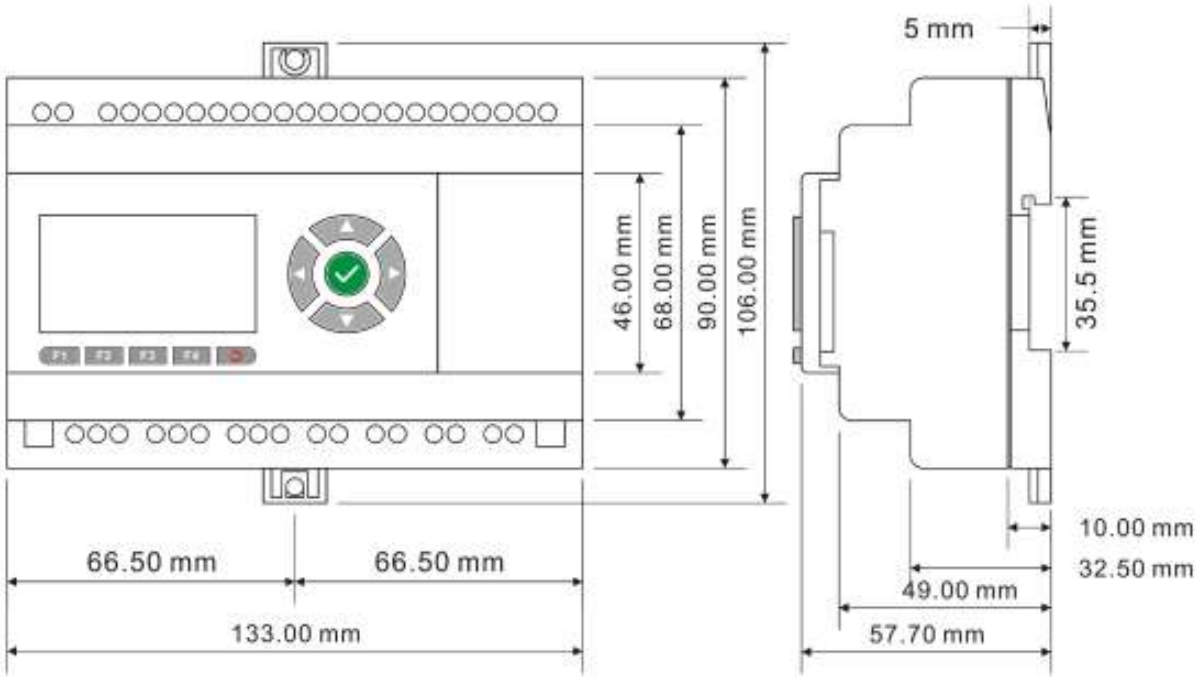
Power supply:	
Nominal voltage	DC 24V
Operating limits	DC 20.4-28.8V
Immunity from micro power cuts	Typ.5 ms
Max. Startup current	Max. 0.3A
Max. absorbed power	10W
Protection against polarity inversions	Yes
Input parameters:	
Input No	16 (I1-IG)
Digital input	16 (I1-IG)
Analogue input	8 (I1-I8)(0..10V 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

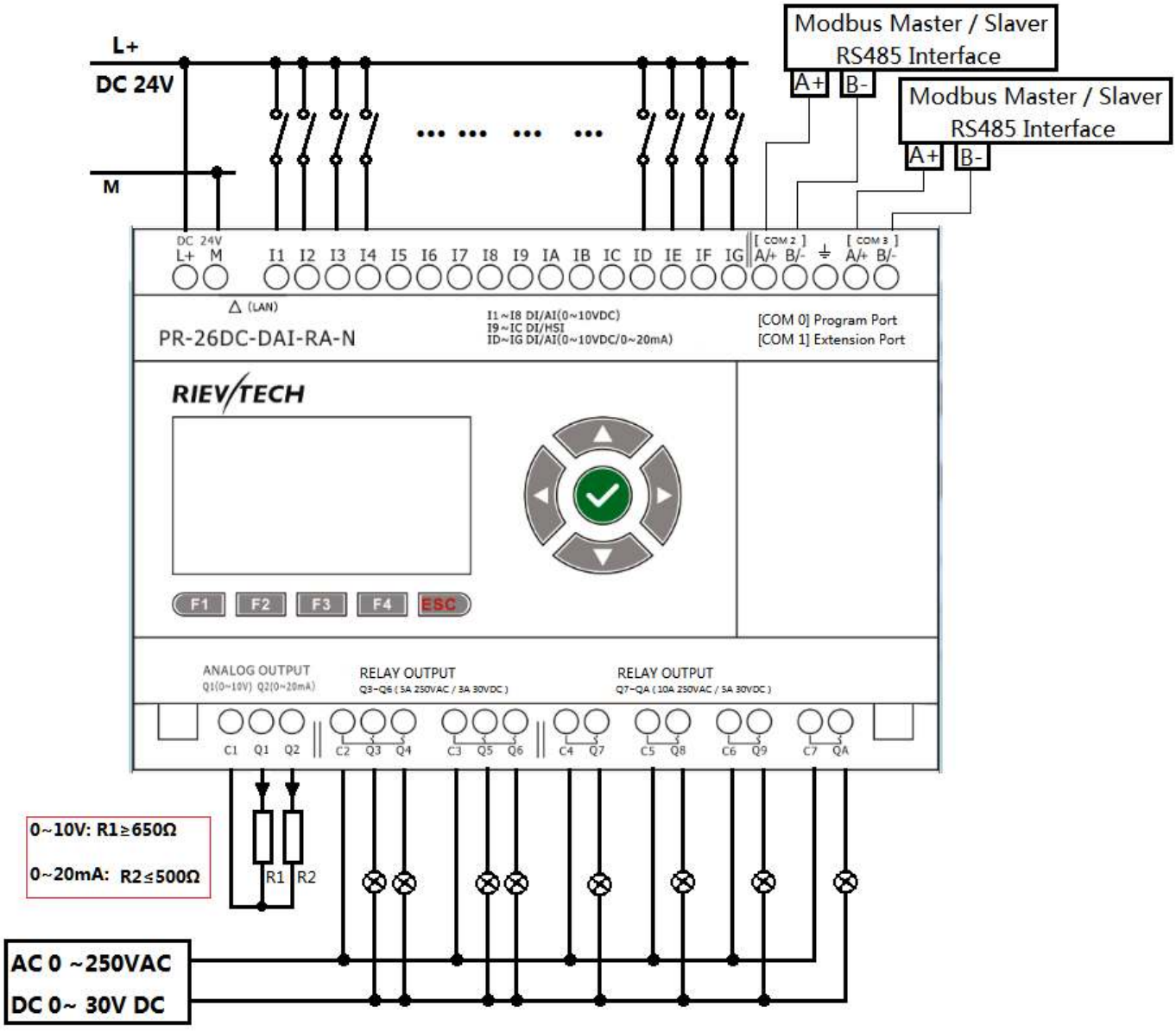
Maximum counting frequency	Typ.：4 HZ
Sensor type	Contact or 3-wire PNP
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
Inputs used as analog inputs(0..10V)(I1-I8)	
Measurement range	DC 0---10V
Input impedance	Min, 24KΩ; Max. 72KΩ
Input voltage	28.8 V 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
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, 24KΩ; Max. 72KΩ
Input voltage	28.8 V DC max

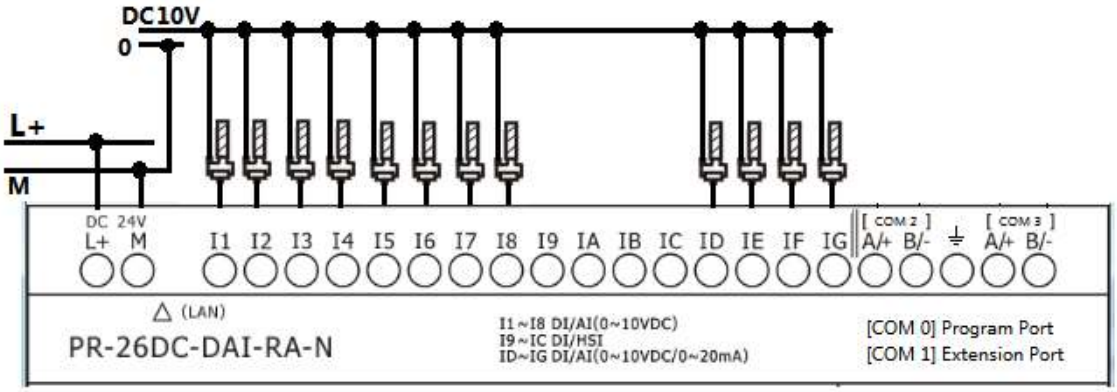
Resolution	10bit ,0.01V
Accuracy at 25 °C	± (Max.0.02)V
Accuracy at 55 °C	± (Max.0.04)V
Isolation between analog channel and power supply	None
Cable length	10 m max. shielded and twisted
Input signal0	< 5V DC;<0.08mA
Input signal1	> 8 V DC;>0.12mA
Input current	0.16mA @ 10.8V dc 0.18mA @ 12.0 V dc 0.34mA @ 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.

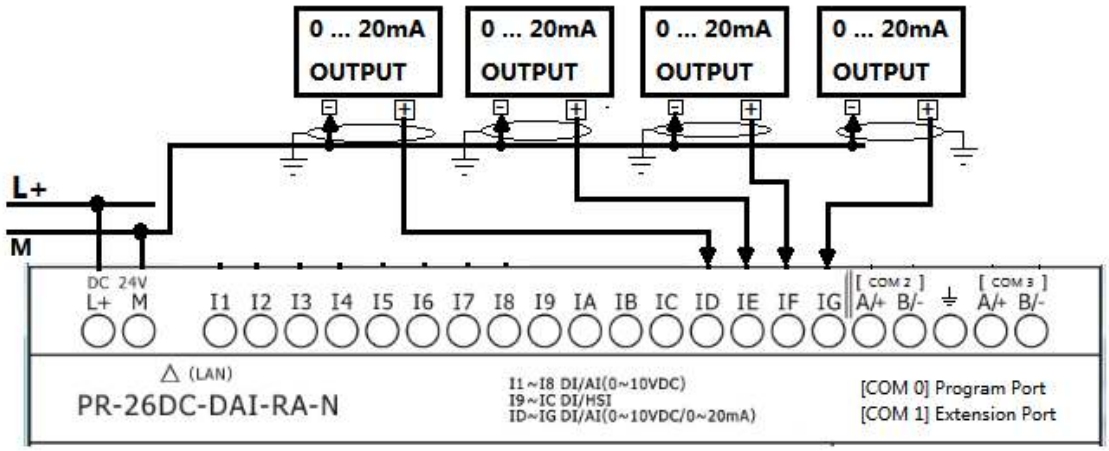
	Release Time: 10 mSec. Max.
Built-in protections	Against short-circuits: None Against overvoltages and overloads: None
10A Relay 4 outputs from Q7 to QA	
Max. breaking voltage	CE:AC 250 V/DC 30 V 10A UL:AC 250 V/DC 28 V 5A
Max. Allowable Power Force	1250VA
Electrical durability Expectancy	10^5 Operations 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

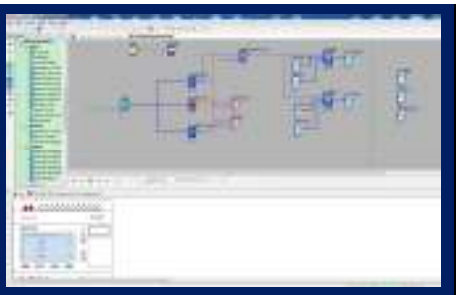





DC10V
0
L+
M
DC 24V
L+ M
I1 I2 I3 I4 I5 I6 I7 I8 I9 IA IB IC ID IE IF IG
[COM 2]
A/+ B/-
[COM 3]
A/+ B/-
△ (LAN)
PR-26DC-DAI-RA-N
I1~I8 DI/AI(0~10VDC)
I9~IC DI/HSI
ID~IG DI/AI(0~10VDC/0~20mA)
[COM 0] Program Port
[COM 1] Extension Port


0 ... 20mA
OUTPUT
0 ... 20mA
OUTPUT
0 ... 20mA
OUTPUT
0 ... 20mA
OUTPUT
L+
M
DC 24V
L+ M
I1 I2 I3 I4 I5 I6 I7 I8 I9 IA IB IC ID IE IF IG
[COM 2]
A/+ B/-
[COM 3]
A/+ B/-
△ (LAN)
PR-26DC-DAI-RA-N
I1~I8 DI/AI(0~10VDC)
I9~IC DI/HSI
ID~IG DI/AI(0~10VDC/0~20mA)
[COM 0] Program Port
[COM 1] Extension Port

Program(xlogicsoft) Specification

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;
	Maximum Number	1024			b.Off-delay etc.
	Timing Ranges	10ms--99 h59m			Up to 12 kind Timers
	Counters				a.Up/down Counter
	Maximum Number	1024			b.Hours Counter
	Highest Count	99999999			c.Frequency Threshold
	Resolution	1			Trigger
	RTC				a.Weekly Timer
	Number available	1024			b.Yearly Timer
	Resolution	1 min			
	Time span available	Week/year-month-day-hour-min			
	Flags				a.Digital Flag
	Digital flags	256			b.Analog Flag
	Analog flags	256			
	PI Functions				a.PI Controller
	Number available	30			
	Parameter Ranges	1-32767			
	Analog Math				a.Analog Math
	Number available	1024			b.Analog Math
	Function	ADD, Subtract,Multiply, Divide			Error detection
	Analog Ramp Function				a. Analog Ramp
	Number available	55			
	Compare Function				a.Analog compactor
	Number available	1024			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, (2 fast output for Transistor)			
	Communication Functions				a.Modbus write
	Number available	1024(Only CPU works as Master need these 2 blocks, slave does not need)			b.Modbus read
	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.