

◆ **Technical Data:**

Model: PR-26DC-DAI-R-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: CE

Installation: 35-DIN rail or screw for installation

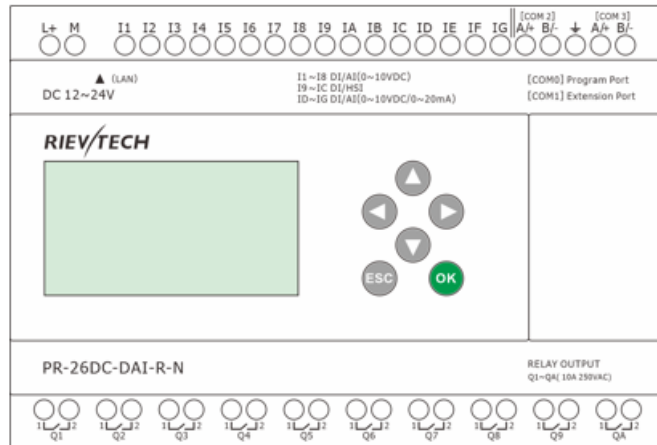
Supported programming language: FBD & Ladder

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 – RS232 Cable), 3 RS485 port (COM1 available via SR-RS485, COM2&COM3 - 2 built-in RS485 port), 1Ethernet port.

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



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Power supply:	
Nominal voltage	DC 12~24V
Operating limits	DC 10.8~28.8V
Immunity from micro power cuts	Typ.5 ms
Max. Startup current	Max. 0.5A
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, Switch on the programming software)
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 dcv

	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	\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
Inputs used as analog inputs (0...20mA)(ID-IG)	
Analogue signal	0....20mA current
Input impedance	260 Ω
Resolution	0.02mA
Accuracy at 25 °C	0.1mA
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 (10 Relay output)	
10A Relay 10 outputs from Q1 to QA	
Safety certified load (resistive)	10A 250V AC
Min switching load	6V 1A
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 over-voltages and overloads: None
Communication ports parameters:	
COM0_TTL port	Can be used as program port with RS232 Cable & USB Cable; Also can be convert to RS232 port with RS232 Cable. 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 SR-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 webservice 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

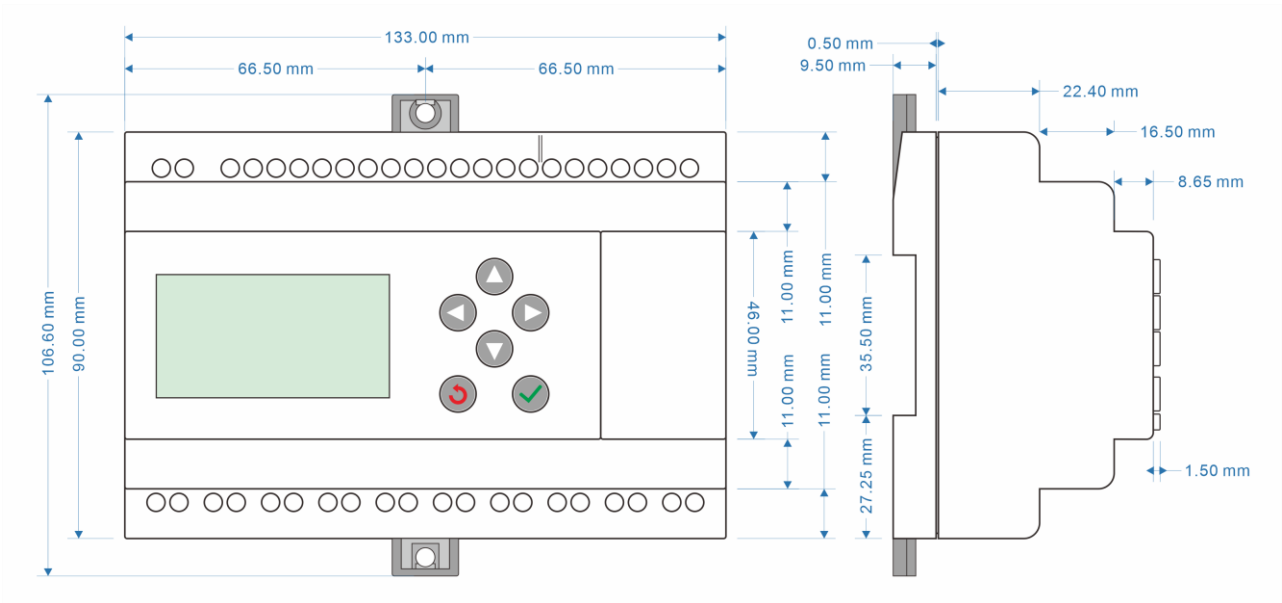
servers separately in maximum

Other parameter

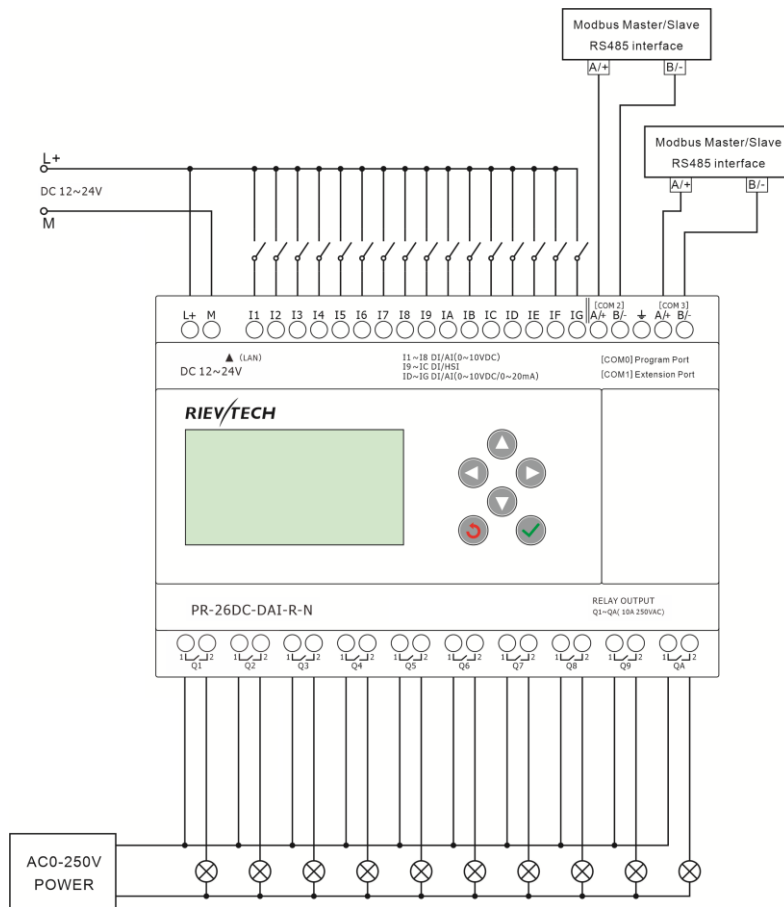
Weight

Approx.400g

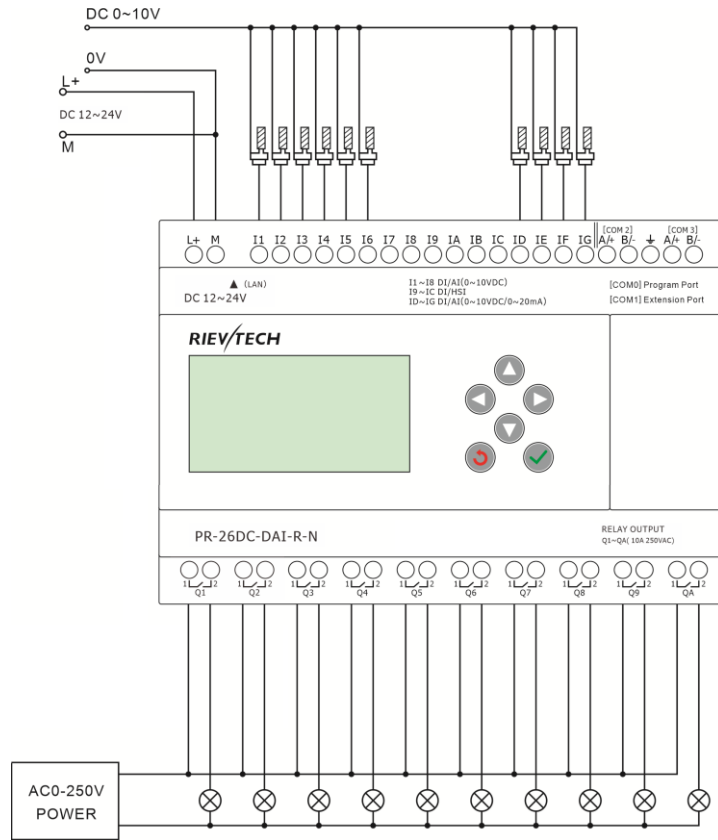
Dimension and wiring



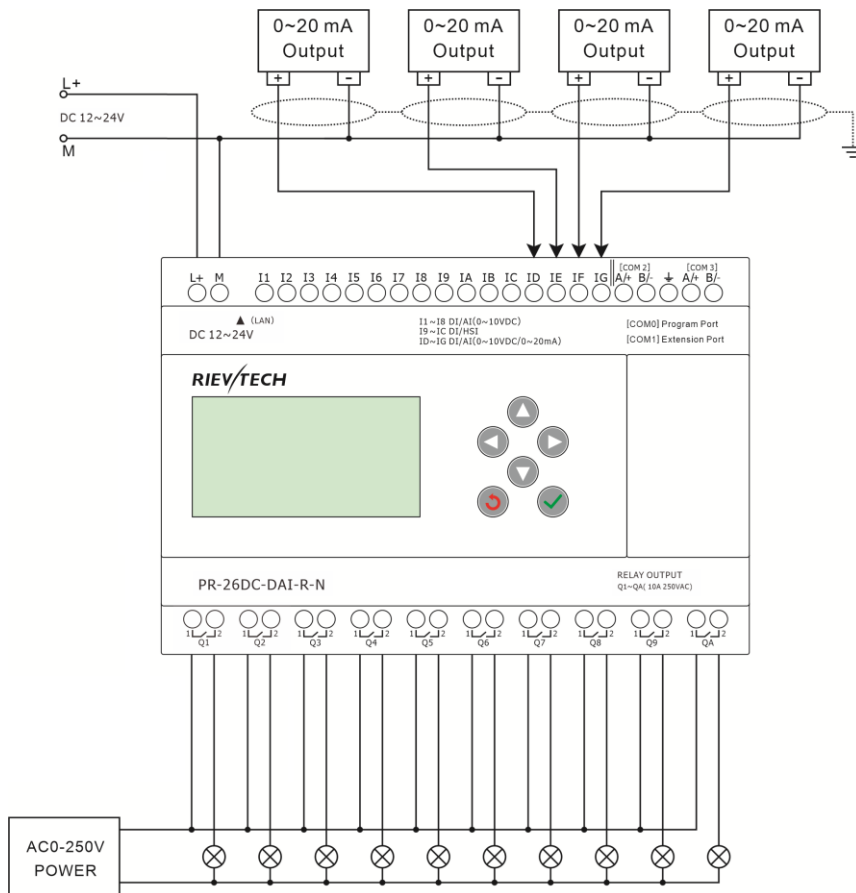
Digital Input / Output



0~10V analog input

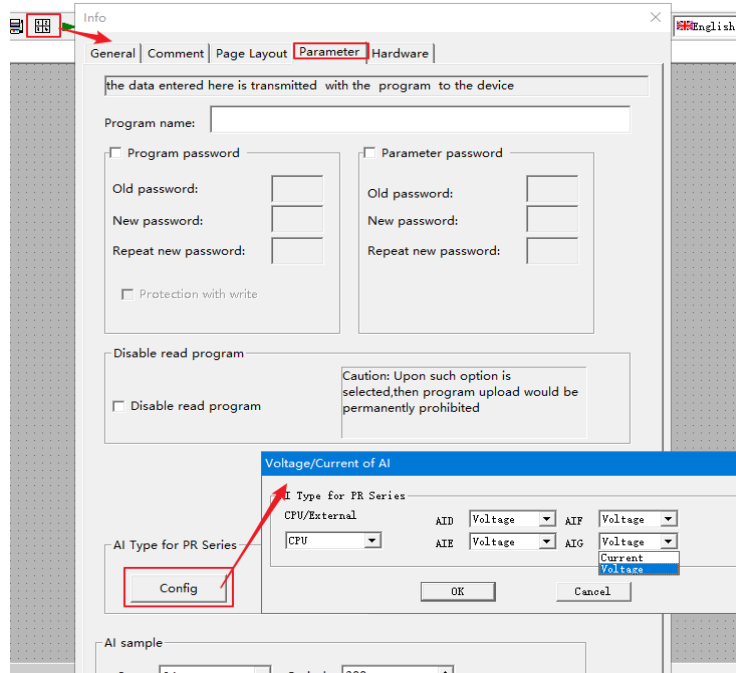


0~20mA analog input

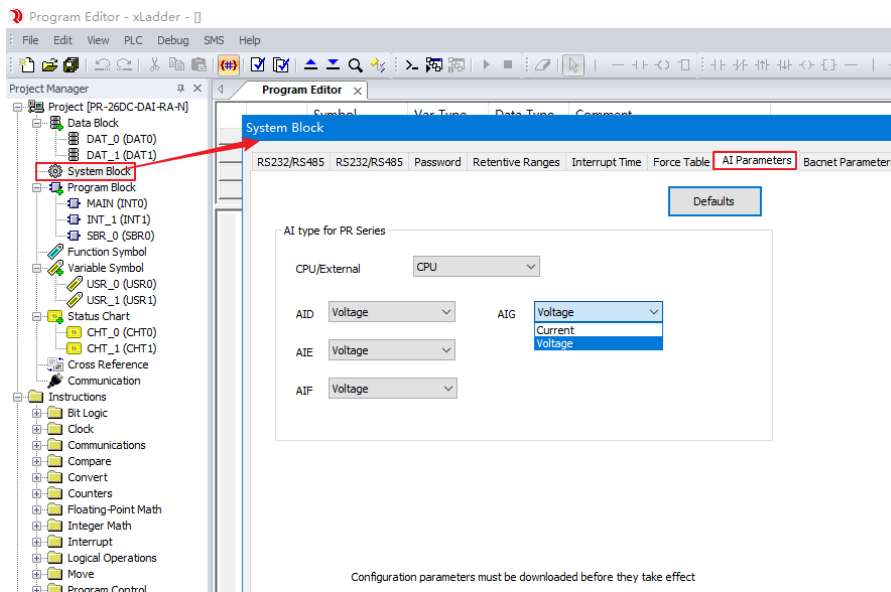


Switch the analog input signal of ID~IG on the programming software, as shown below:

xLogic



xLadder



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; 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					a.Analog compactor b.Comparison of 2 values
Number available	1024				
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 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.					