

## Brochure Micro-control

Sales expertise for your applications requirements



### Digital/analog input and high-speed counting

The DC main machine provides 8 analog inputs (I0~I10/0-10VDC, A0~A1/4-20mA) and 2 high-speed digital outputs at most (Q2~Q3/10KHZ).

### Small size and flexible extension

I/O can be extended to The max. 112DI, 62DO, 2AI, 2AO. And the user can realize the flexible application of the controller with the APB-EXPMC communication extension module.

### Self-define menu multi-language switching

Both APB PLC and its programming software support many languages, such as Chinese, Japanese, English, German, French, and Russian.

### PNP/NPN input

It can receives PNP/NPN sensor signals directly, No more time-consuming rewiring.

### Date Retentivity

Retain the current data after power failure and resume operation at the break point, and ensure the equipments operate safely and reliably.

### 43 FBDs, 320 blocks capacity

APB software integrates 10 basic function blocks and 33 special function blocks. Thus various control circuits can be constructed simply and conveniently.

### Easy programming, simulation and monitoring

By the offline simulation and the online monitoring to modify the variable parameters to save cost and time with FBD programming.

### Converting the summer/winter time

Reduce the required changes and maintenance.

### SMS module and remote control

Fault alarm and remote monitoring through the SMS message, and it can read and modify I/O, register and DW status.

### Password protection

Multiple level password protection, to increase the system security.



## APB Series PLC

- ➔ CE approval
- ➔ Power failure protection
- ➔ Analog input and output
- ➔ High-speed counting input and output
- ➔ New function blocks as PWM, PTO, acceleration/deceleration single-phase pulse, SMS and analog calculation etc.
- ➔ SMS module
- ➔ Real-time clock
- ➔ Password protection
- ➔ Flexible extended function (1141, 640)
- ➔ 320 FBDs logic function blocks MODBUS protocol
- ➔ Small-sized multi-language displaying LCD panel

## Product Models

Type	Power Supply	Input	Output
APB-12MRD(L)	DC12-24V	8 points DC (8 points AI, I4-I7 can be high-speed ports)	4 points relay output
APB-12MTD(L)	DC12-24V	8 points DC (8 points AI, I4-I7 can be high-speed ports)	4 points NPN transistor output Q2, Q3 can be high-speed ports
APB-12MGD(L)	DC12-24V	8 points DC (8 points AI, I4-I7 can be high-speed ports)	4 points PNP transistor output Q2, Q3 can be high-speed ports
APB-12MRA(L)	AC100-240V	8 points AC input	4 points relay output
APB-22MRA(L)	AC100-240V	14 points AC input	8 points relay output
APB-22MRD(L)	DC12-24V	14 points DC input (the first 12 points can be AI, I4-I7 can be high-speed ports)	8 points relay output
APB-22MTD(L)	DC12-24V	14 points DC input (the first 12 points can be AI, I4-I7 can be high-speed ports)	8 points NPN transistor output Q2, Q3 can be high-speed ports
APB-22MGD(L)	DC12-24V	14 points DC input (the first 12 points can be AI, I4-I7 can be high-speed ports)	8 points PNP transistor output Q2, Q3 can be high-speed ports
APB-24MRDL	DC12-24V	2 points for current 4~20mA input, and 14 points for digital input ( the first 12 points can be 0~10V analog inputs); I4-I7 can be high-speed ports	6 points relay output + 2 current 4~20mA outputs
APB-22ERA	AC100V-240V	14 points digital input	8 points relay output
APB-22ERD	DC12V-24V	14 points digital input	8 points relay output
APB-22ETD	DC12V-24V	14 points digital input	8 points NPN transistor output
APB-22EGD	DC12V-24V	14 points digital input	8 points NPN transistor output

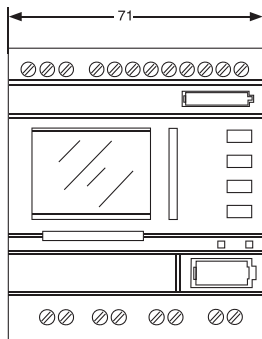
## Product Accessories

APB-232	Communication cable between APB with PC RS232
APB-DUSB	Communication cable between APB with PC USB
APB-EXPMC	APB communication extension module
APB-SMS	Send alarming information, query and set APB parameters
APB-ECB	Remotely connect the host with extension module (about 70cm)

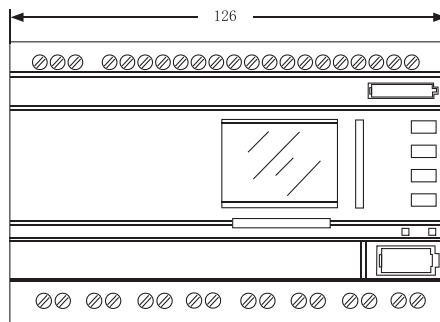
## Technical Parameters

Item	Content
Surge immunity	2kv(common mode), 1kv(differential mode), Level 3 (IEC61000-4-5)
Electrostatic discharge (outer casing)	± 8kv(air discharge)/ ± 6kv(contact discharge), Level 3 (IEC61000-4-5)
Ambient temperature	-10°C ~ +55°C
Storage temperature	-40°C ~ +70°C
Ambient humidity	5% ~ 95%RH
Protection degree	IP20 (Non-waterproof)
Installation	Fixing with M3 screws or Standard DIN rail mounting
Dimensions (mm)	71*99*90 ( 12 points); 126*99*90 ( 22 points); 126*99*90(24 points)
Programming language	FBD
I/O	12 points/22 points/24 points/supporting 7 I/O extension modules
Memory capacity	320 FBDs
Filtering duration of input signal	It can be set to improve the stability of signals.
Real-time clock	160h and a Li-ion battery can be placed when necessary
Password protection	Multiple passwords protection
High-speed operation	At most 4 high-speed inputs 10KHz, and 2 high-speed outputs 10KHz
Analog operation	At most 12 voltage 0~10V and 2 current 4~20mA analog inputs, and 2 analog outputs
Power failure protection	Yes
Simulate monitoring	Yes
Communication interface	TTL interface; besides, communication module supports 2*RS485 and 1*RS232 interfaces
Baud rate	9600bps
Communication protocol	MODBUS RTU

## Installation Dimensions



APB-12(mm)



APB-22(mm)

