



APM801 0.2S Three-Phase Multifunction Panel Meter

High-accuracy energy and demand monitoring for three-phase low-voltage distribution panels.



Accuracy	Class 0.2S	Rated input	100/110/400/690 V; 1 A or 5 A
Demand	I, P, Q and S; real-time/max + timestamp	Communication	RS485 Modbus-RTU; optional Ethernet/Profibus
I/O	Built-in 2DI + 2DO	Mounting	96 x 96 mm panel; 92 x 92 mm cut-out

APM801 measures voltage, current, frequency, active/reactive/apparent power, power factor and four-quadrant energy. It records real-time and maximum demand with timestamps and supports alarms, event logging, multi-tariff energy and modular communication or I/O expansion.

Standard Functions and Expansion Modules

Function	APM801 standard capability
Electrical measurement	Full electrical parameters and four-quadrant energy
Demand	Three-phase current and active/reactive/apparent power; real-time and maximum demand with timestamp
Demand method	Sliding window: 1, 2, 3 or 5 min; demand period: 5-60 min
Energy	Multi-tariff energy plus active/reactive pulse output
Records	Extreme-value records, 66 alarm types and 128 recent event records
Power monitoring	Current/voltage unbalance and phase-angle measurement
Communication and I/O	RS485 Modbus-RTU and DL/T 645; built-in 2DI + 2DO

Optional modules

Module	Function
MD82	8DI + 2DO with changeover contacts
MLOG	TF-card storage for alarms, events, electrical parameters and timed energy records
MA84	8 analog inputs + 4 analog outputs, Class 0.5
MCM	Additional RS485 Modbus-RTU, master or slave
MCP	Profibus-DP
MCE	Ethernet with Modbus-TCP, HTTP, SMTP and DHCP
MTH / MTP	Temperature/humidity monitoring or 2-channel PT100 input

Expansion functions depend on the ordered configuration.

Technical Specifications

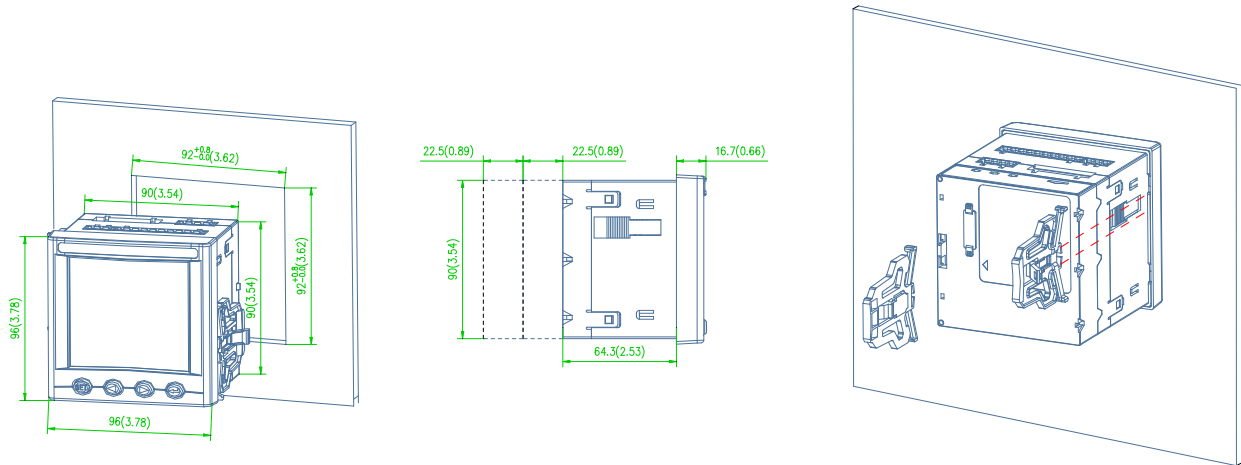
Parameter	Specification
Electrical network	Three-phase three-wire or three-phase four-wire
Frequency	45-65 Hz
Rated voltage	AC 100 V, 110 V, 400 V or 690 V
Voltage overload	1.2 x rated value continuously; 2 x for 1 s; consumption <0.5 VA/channel
Rated current	AC 1 A or 5 A
Current overload	1.2 x rated value continuously; 10 x for 1 s; consumption <0.5 VA/channel
Accuracy	Voltage, current and active power: Class 0.2S; reactive power: Class 2
Pulse output	Open-collector optocoupler; 4000 imp/kWh at 5 A or 8000 imp/kWh at 1 A
Relay output	AC 250 V / 3 A or DC 30 V / 3 A
Communication	RS485 Modbus-RTU and DL/T 645; optional Profibus-DP or Ethernet Modbus-TCP / HTTP / SMTP / DHCP
Auxiliary supply	AC/DC 85-265 V or AC/DC 115-415 V (P2); main meter consumption ≤15 VA
Protection	Display panel IP52
Environment	Operation -20 to +65 C; storage -20 to +70 C; humidity ≤95% non-condensing; altitude ≤2500 m
Standards	IEC 61000-4, IEC 61557-12 and IEC 62053-22

For model selection, wiring, communication registers and safety instructions, refer to the complete APM Series Installation and Operation Instruction V2.7 included with this package.

4. Installation and wiring instructions

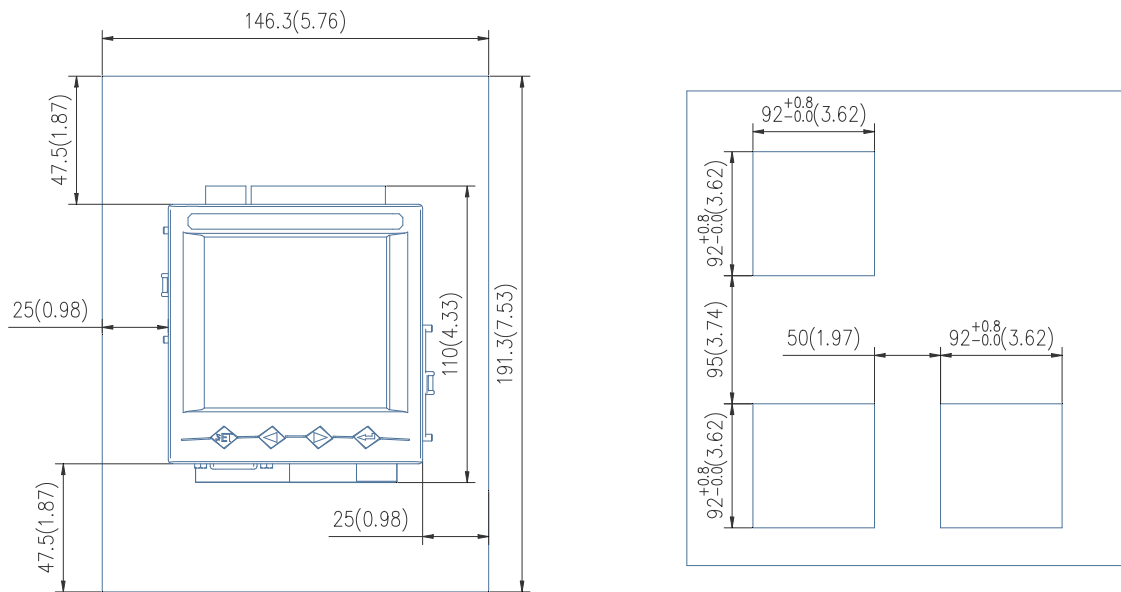
4.1 Installation dimensions

Meter and panel opening size(unit: mm(in))



Note: The maximum clamshell Angle is 90°.

Multiple meter installation (unit: mm(in))



4.2 Wiring method

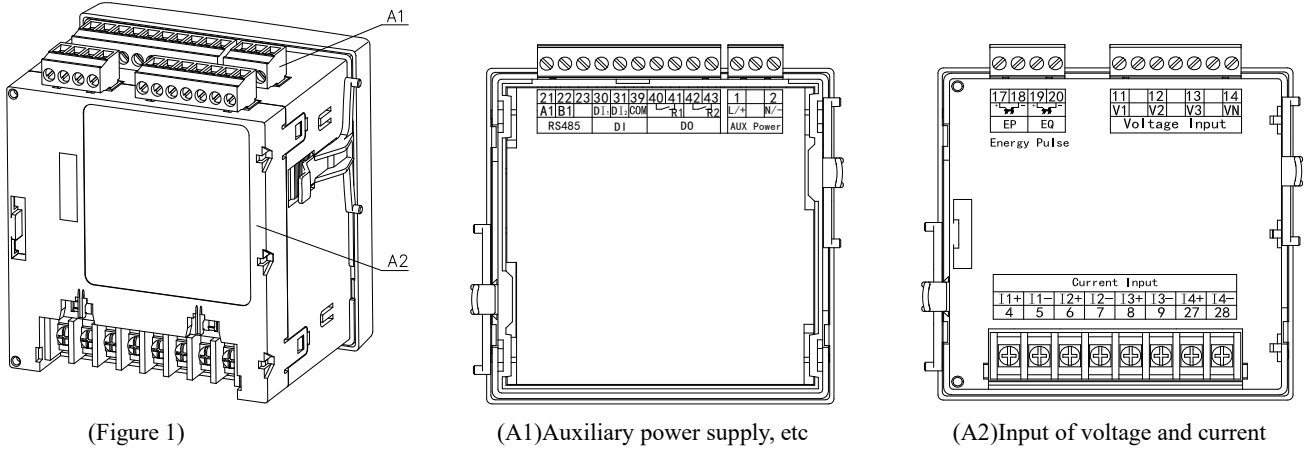
According to different design requirements, it is recommended to add a fuse (BS88 2A gG) to the power supply and voltage input terminals to meet the safety requirements of the relevant electrical specifications.

Terminal Screw Torque Specification Table

Specification	Tightening torque	Remarks
Barbed terminal block	0.5 N·m	For current incoming line connection
M3 Terminal	0.5 N·m	Used for RS485, DIDO, auxiliary power supply, voltage input and other terminals

4.2.1 Main part

Terminal diagram: "4,5,6,7,8,9" is the current signal input terminal number; "11,12,13,14" the voltage signal input terminal number; "1, 2" is the meter auxiliary power terminal number. "21, 22" is the communication terminal number; "17, 18, 19, 20" is the energy pulse output terminal number; "30, 31, 39" is the switch input terminal number; "40, 41, 42, 43 " is the relay output terminal number. (Figure 1)



Wiring method of signal input:

