

APM521

Panel Meter**96 x 96 mm****Class 0.2S****1 A / 5 A**

Application

- Comprehensive three-phase electrical measurement and energy monitoring in low-voltage power systems
- Used in switchgear, distribution panels, data centers, renewable-energy systems and industrial power-quality monitoring

Basic Parameters

- Panel size: 96 x 96 mm; cut-out: 88 x 88 mm
- Rated current: 1 A or 5 A
- Voltage/current/power accuracy: $\pm 0.2\%$
- Active energy: Class D (0.2S); reactive energy: Class 2
- Frequency: 50/60 Hz
- Communication: RS485 Modbus-RTU; optional Ethernet and I/O modules

Product Overview

The APM521 combines high-accuracy three-phase electrical measurement, energy metering, power-quality analysis, demand, harmonic and event recording in a 96 x 96 mm panel-mounted meter. It supports modular I/O and communications, including RS485/Modbus-RTU, optional Ethernet/Modbus-TCP, DI/DO and 4-20 mA analog outputs. Embedded installation is standard, with an optional rail-mounted configuration.

Technical Indicators



- Rated voltage: 66/115 V, 230/400 V, 277/480 V or 400/690 V
- Rated current: 1 A or 5 A
- Auxiliary power: AC/DC 85-300 V
- Power consumption: ≤ 4 W, 10 VA



- Voltage, current and power accuracy: $\pm 0.2\%$
- Active energy: Class D (0.2S); reactive energy: Class 2
- Power quality: harmonics 2-63, imbalance, deviation and sequence components
- RS485 Modbus-RTU; optional Ethernet Modbus-TCP/FTP
- Optional 4DI/2DO, 2AO 4-20 mA and second RS485



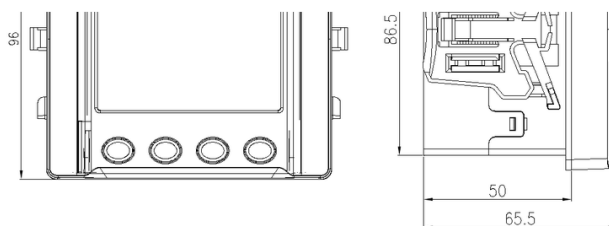
- Operating temperature: -40°C to $+70^{\circ}\text{C}$
- Storage temperature: -40°C to $+80^{\circ}\text{C}$
- Humidity: $\leq 95\%$ without condensation
- Altitude: ≤ 2000 m
- IP54 front panel; IP30 body; indoor dry location

Product Feature



The APM521 combines high-accuracy three-phase electrical measurement, energy metering, power-quality analysis, demand, harmonic and event recording in a 96 x 96 mm panel-mounted meter. It supports modular I/O and communications, including RS485/Modbus-RTU, optional Ethernet/Modbus-TCP, DI/DO and 4-20 mA analog outputs. Embedded installation is standard, with an optional rail-mounted configuration.

Installation Instruction
APM521 — Embedded installation
Actual product

Official dimension drawing


Panel: 96 x 96 mm | Cut-out: 88 x 88 mm | Shell: 86.5 x 86.5 x 50 mm

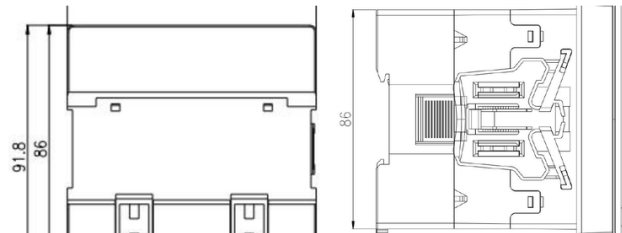
Installation Instruction

APM521 — Optional rail-mounted configuration

Actual product



Official dimension drawing



Rail configuration: 96 x 96 x 96 mm | Optional module depth: 30.5 mm

Specifications**APM521 Core Specifications**

Input and measurement	
Rated voltage	66 V L-N / 115 V L-L; 230 V L-N / 400 V L-L; 277 V L-N / 480 V L-L; 400 V L-N / 690 V L-L
Rated current	1 A or 5 A
Accuracy	Voltage, current and power: +/-0.2%; active energy: Class D (0.2S); reactive energy: Class 2
Frequency	50/60 Hz, +/-0.2%
Power, communications and options	
Auxiliary power	AC/DC 85-300 V; consumption <=4 W, 10 VA
Standard communication	RS485, Modbus-RTU; 1200-38400 bps
Optional modules	4DI/2DO; 2AO 4-20 mA; second RS485; Ethernet Modbus-TCP and FTP
Installation and environment	
Panel installation	96 x 96 mm panel; 88 x 88 mm cut-out; shell 86.5 x 86.5 x 50 mm
Environment	Operating -40°C to +70°C; storage -40°C to +80°C; humidity <=95% without condensation; altitude <=2000 m
Protection	IP54 front panel; IP30 body; indoor dry location