

PA(V)256 Series Single-Phase and Three-Phase Digital Display Ammeter (Voltmeter)



1 Overview

PA/V256 series single-phase and three-phase digital display ammeter and voltmeter (hereinafter referred to as the instrument) is a new generation of programmable intelligent instrument, and is widely used in various intelligent power distribution systems such as power monitoring, industrial automation, and switchgear. The instrument is primarily used for the real-time measurement and display of the voltage, current and frequency of the power line, integrating with communication, alarm, analog transmission and switching input, and has advantages of high measurement accuracy, good linearity, long-term operation without adjustment, programmable setting parameters. The product follows the development trend of digitalization, modularization and networking of installed digital display electrical measuring instrument with high cost-performance and simple and practical function combination.

2 Product Parameters

Technical parameter			Technical indicator
Input	Voltage	Rated value	AC 100V, 400V, 690V
		Overload	Duration: 1.2 times; instantaneous: 2 times / 5s When out of 2 times rated value, the "HHH" overload mark will display
		Power consumption	<1VA (per phase)
	Current	Rated value	AC 1A, 5A
		Overload	Duration: 1.2 times ; instantaneous: 10 times / 5s When out of 2 times rated value, the "HHH" overload mark will display
		Power consumption	<1VA (per phase)
	Frequency		45Hz~65Hz
Measurement accuracy	Current	Grade 0.5	
	Voltage	Grade 0.5	
Input function	Switching input		Support 2-circuit passive dry contact input, optocoupler isolation
Output function	Alarm output		The upper and lower limit alarms are output from the same relay, with contact capacity AC250V/2A, DC30V/2A
	Analog transmission output		Output spec. 0 ~ 20mA, 4 ~ 20mA optional, grade 0.5, output load ≤ 500Ω
	Communication		RS485 communication interface, supporting both Modbus-RTU and DL/T 645-2007 dual protocols, baud rates 1200, 2400, 4800, 9600, 19200 optional
	Display mode		LED digital tube display, the highest resolution is voltmeter 0.1V, ammeter 0.001A, units are automatically switched and decimal points are automatically shifted
	Display range		Voltmeter: AC 0 ~ 9999kV Ammeter: AC 0 ~ 999.9kA
Aux. power supply	Range		AC, DC85V ~ 265V or AC220V, 50Hz/60Hz
	Power consumption		<15VA
Safety	Power frequency withstand voltage	Input and aux. power supply	> 2kV 50Hz/1min
		Input and output	
		Output and aux. power supply	
Insulation resistance		Aux. power support, input, and output to the meter housing is > 100MΩ	
Electromagnetic compatibility	Electrostatic discharge immunity		GB/T 17626.2 Grade 4
	Quick transient pulse train immunity		GB/T 17626.4 Grade 4
	Surge (impact) immunity		GB/T 17626.5 Grade 4
	High-frequency electromagnetic field		80MHz ~ 1000MHz, 10V/m
Ambinet temp.	Temperature		Storage and operation: -25°C~ 55°C
	Humidity		≤ 93%RH, non-condensation, and no corrosive gas
	Altitude		≤ 2500m

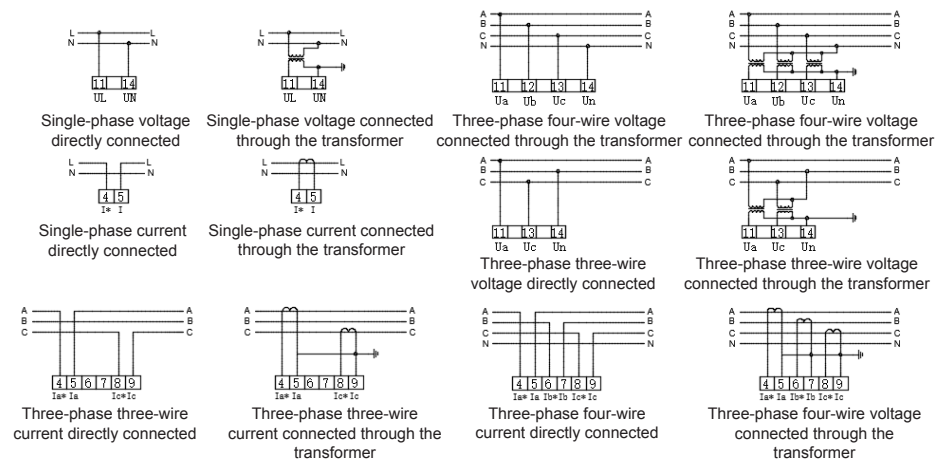
Note: Single-phase meter does not support switching input and analog transmission output functions.

PA(V)256 Series Single-Phase and Three-Phase Digital Display Ammeter (Voltmeter)

3 Outline and Installation Dimensions

Model	A	B	C	D	E	Hole size (W x H)	Remarks
PA/V256-48S	48mm	48mm	45mm	65mm	72mm	46mm×46mm	Suitable for single phase instrument
PA/V256-72S	72mm	72mm	65mm	76mm	83.5mm	66mm×66mm	
PA/V256-80S	80mm	80mm	74mm	76mm	83.5mm	75mm×75mm	
PA/V256-96S	96mm	96mm	89mm	76mm	84.5mm	90mm×90mm	
PA/V256-120S	120mm	120mm	110mm	76mm	84.5mm	111mm×111mm	Suitable for single phase instrument

4 Wiring Diagram



PA(V)256 Series Single-Phase and Three-Phase Digital Display Ammeter (Voltmeter)

5 Precautions

- 5.1 Before power-on, please confirm that the power supply and input signal of the instrument are within the scope of application again, and that each terminal is connected properly and firmly.
- 5.2 The meter shall be warmed up for 15 minutes to ensure accurate measurement.
- 5.3 The meter shall not be subject to knocks, collisions, and violent vibrations, and the working environment should meet the technical requirements.
- 5.4 The warranty period of the instrument is 24 months. For poor quality of the meter including damage occurred during transportation (excluding unpacking without permission), please contact the company or local dealers directly, and our company will quickly replace it free of charge.

6 Ordering Notice

- 6.1 Please specify the model, specification, quantity, auxiliary power supply, and structural form when selecting the instrument.
- 6.2 When RS485 communication function, switching input function, switching output function, and transmitter output function are required, please clearly specify them when ordering. The conventional product has no above functions (multifunctional meter has RS485).