

# Mounted Digital Instrument

## PD666-□ Series Digital Multi-function Meter



## 11PD666-□S Series Digital Multi-function Meter

11.1 Function: PD666-□-type Digital Multi-function Meter (hereinafter referred as the meter) is designed for the demands of power monitoring and electric energy measurement of electric system, communications industry and construction industry. It is mainly used to measure and display in a real-time manner such power parameters as three-phase voltage, three-phase current, active power, reactive power, frequency, power factor, four-quadrant electric energy and so on in the power circuits. It can be networked with external devices via RS485 communication interface to realize far-distance transmission of data. The meter is extensively applied in various intelligent distribution systems of power monitoring and industrial automation.

### 11.2 Variety & specification and selection description

Product function	Model	PD666 3S3	PD666 6S3	PD666 -8S3	PD666 3S4	PD666 6S4	PD666 8S4	PD666 6S1	PD666 6S9
Real-time measurement	Three-phase voltage	✓	✓	✓	✓	✓	✓	✓	
	Three-phase current	✓	✓	✓	✓	✓	✓	✓	✓
	Power	✓	✓	✓	✓	✓	✓		
	Power factor	✓	✓	✓	✓	✓	✓		
	Frequency	✓	✓	✓	✓	✓	✓		
Electric energy measurement (Cannot be used as billing basis)	Active energy	✓	✓	✓	✓	✓	✓		✓
	Reactive energy	✓	✓	✓	✓	✓	✓		✓
	Two-way measurement	✓	✓	✓	✓	✓	✓		✓
Electric energy pulse	✓	✓	✓	✓	✓	✓		✓	
Rs485 communication	✓	✓	✓	✓	✓	✓	✓	✓	
Displaying mode		Segment code LCD			Three-row four-digit LED				Two-row six-digit LED

Note: “✓” indicates this model has corresponding function.

### 11.3 Main technical performances and parameters

Technical parameters		Index	
Input	Network	Single-phase, three-phase three-wire or three-phase four-wire available	
	Voltage	Rated value	AC100V, 220V, 450V; other special specifications customizable
		Overload	Continuous: 1.2 times; instantaneous: 2 times/5s; display “HHHH” overload symbol if exceeding the rated value by 1.2 times
		Power consumption	≤2VA (each phase)
	Impedance		>500KHz
		Rated value	AC1A、 5A
	Current	Overload	Continuous: 1.2 times; instantaneous: 10 times/5s; display “HHHH” overload symbol if exceeding the rated value by 1.2 times
		Power consumption	≤1VA (each phase)
		Impedance	<20mΩ (each phase)
	Measuring range of frequency		45Hz~65Hz
Displaying mode		current 0.001A, active power 1W, reactive power 1var, apparent power 1VA, power factor 0.001, frequency 0.01Hz, electric energy 0.01kWh; automatic unit switching, automatic shifting of decimal point.	
Output	Output mode	Open optocoupler pulse output of two-way collector	
	Electric energy	Pulse constant	Voltage ≥220V, current 1A/5A
		Communication (Active imp/kwh; Reactive imp/kvarh)	Voltage 100V, current 5A
			Voltage 100V, current 1A
		Voltage 100V, current 1A	
Communication	Mode	RS-485	
	Protocol	MODBUS-RTU	
	Baud rate	1200bps, 2400bps, 4800bps, 9600bps, 19200bps, default as 9600bps	

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Technical parameters		Index
Accuracy class	Voltage, current, active power, Apparent power, frequency, power factor	Class 0.5
	Reactive power	Class 1
	Active electric energy	Class 1
	Reactive electric energy	Class 2
	Power supply	Range
	Power consumption	<15VA
Environment	Temperature	-25°C~55°C
	Humidity	25%RH≤Humidity≤93%RH, no condensation of moisture, sites without corrosive gas
	Atmospheric pressure	86kPa~106kPa

## 11. 4 Wiring mode

