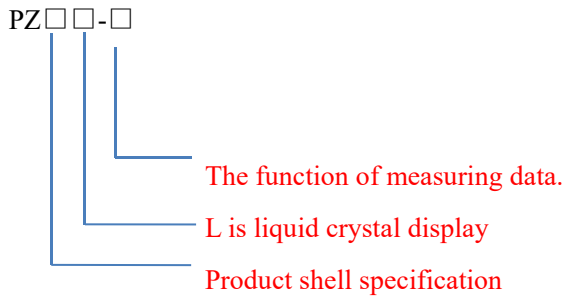


PZ Series Intelligent DC Energy Meter

General

PZ series intelligent DC energy meter is designed for applications such as DC panels, solar power, telecommunications base stations, and charging posts. This series of instruments can measure voltage, current, power, forward and reverse power in DC system. It can be used for local display, and connected with industrial control equipment, computers, form a measurement and control system. And it has a variety of external excuse functions for the user to choose: RS485 communication interface, Modbus-RTU protocol, relay alarm output, digital input/output. According to different requirements, through the instrument panel keys, you can set the ratio, communication parameters.

Type Description



Type and Function

Type	Basic Function	Exterior	Optional Function
PZ72L-DE	voltage 、 current 、 power、 energy; LCD display	72 quare	1、 RS485 (/C) 2、 12V power output①(/V) 3、 RS485 + 2DO (/KC) 4、 RS485 + 2DI2DO(/KC) 5、 RS485 + 2DO + 12V power output(/KVC) 6、 RS485 + 12V power output (VC) The above functions can have the following two optional functions at the same time: 1、 Auxiliary power 20-60V(/ZD) 2、 Multiple rate (F)

Annotation: ①The function of 12V power output and DI can not be selected at the same time.

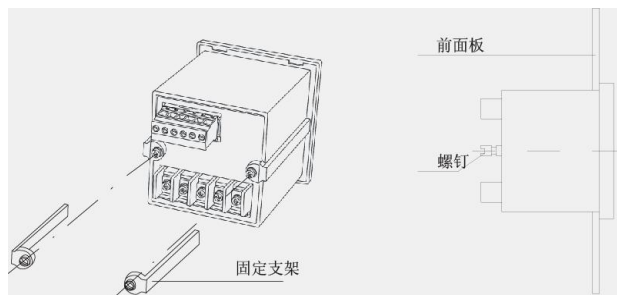
Technical Parameters

Technical Parameters		Indicators		
Input	DC voltage	Input range	0~100V,0~500V,0~1000V	
		Input resistance	$\geq 6k\Omega/V$	
	DC current	Input range	(External Shunt or Hall Current Sensor, the range can be set)	
		Shunt	75mV	
		Hall Current Sensor	0~20mA、0~5V	
	Power consumption	$\leq 1mW$		
	Overload	It can work at normal status at 1.2 times of full load, and can continued work 1 second at 2 times of full load.		
Accuracy class		0.5class		
Function	Measuring	Voltage、 Current、 Power		
	Calculate	Current total electricity、 Current positive energy、 Current reverse power		
	Multiple rate	Four time zones、 two time table、 fourteen time points、 four multiple rates. (PZ72L-DE support only)		
	Historical data statistics	Last 12 months of historical electricity(multiple rate electricity).(PZ72L-DE support only)		
	DI、 DO	2DI(Collect and display local switch status information、 Realize remote transmission by RS485)、 2DO(Relay output, can achieve "remote control" and alarm output)		
	Display	LCD(the backlight delay time can be adjusted) or LED		
	Communication	RS485、 Half duplex、 Photoelectric isolation、 Modbus-RTU / DL/T645-07、 Band:1200/2400/4800/9600、 Infrared: 1200		
		DI、 DO	(DI)	Dry contact input, Meter built-in power supply, photoelectric isolation
		(DO)	Two relay outputs, Normally open contact, capacity:2A/30VDC or 2A/250VAC	
Working power	Voltage range	85~265VAC/DC、 50/60Hz; 20~60VDC		
	Power consumption	$\leq 2W$		
Insulation resistance		$\geq 100M\Omega$		
Power frequency withstand voltage		3kV/1min (RMS) (between the power supply binding post and the signal binding post)		
Environment	Temperature	Operation: -20°C~+60°C; Storage: -20°C~+70°C		
	Humidity	$\leq 93\%RH$, No condensation, no corrosive gases		
	Altitude	$\leq 2500m$		

Dimensions and cut-out dimensions

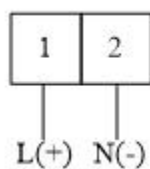
Shape	panel		shell		aperture		
Unit:mm	Wide	High	Wide	High	Deep	Wide	High
72square	75	75	66	66	98	67	67

Installation diagram



Terminal and wiring

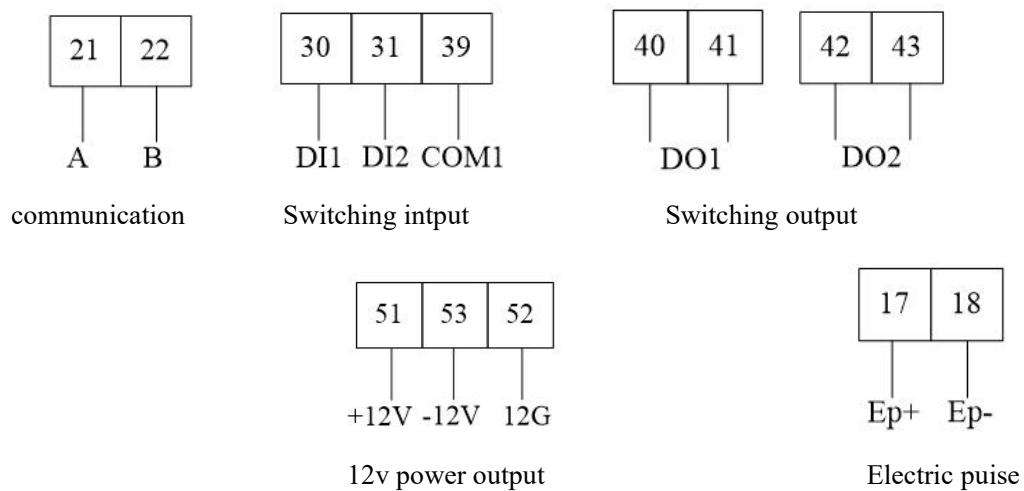
Instrument auxiliary power terminal



auxiliary supply

Signal input terminal





Additional functional terminals



additional functional terminals



Operation and Display

key function description

Button icon	Key name	Key function
	Menu key	Entry/exit menu
	Left arrow key	Check power parameters、 Left shift and scintillation shift in programming interface
	Right arrow key	Check power parameters、 Left shift and scintillation shift in programming interface
	Programming definition key	Check power parameters、 Left shift and scintillation shift in programming interface

LCD interface

Display current total power after power-on.

	current forward total spike power, current forward total peak power, current forward total level power, current forward total Valley power, current reverse total spike power, current reverse total peak power, current reverse total level power, current reverse total Valley power,voltage,current,power,version number.
	

All display interface names of PZ series DC watt-hour meters listed above. Left and right buttons can switch different types of display contents. The order of switching is as follows:

For instruments without the multi-rate function, the date and time and multi-rate energy are not displayed.