

# PZ Series DC Power Meter

For DC network measurement, such as solar power station, telecom station

## 1. General

PZ series DC analyzer is designed for application in GZDW, solar power supply, telecom station. It can measure voltage, current, power, forward and reverse energies of DC network. It may be used for local display and connected with the control equipment to regroup measuring and controlling system.

It can be equipped RS485 communication under Modbus-RTU protocol; and it has options of analog output, relay alarm, digital input/output. According to different request, meter's parameters can be set by 4 keys on its panel.



## 2. Technical feature

Technical feature		Value	
Input	DC volt	Range	0~1000V
		Impedance	$\geq 2k\Omega/V$
	DC current	Range	0~10A input directly (Start 5mA) 0~9999A (with Shunt or Hall component)
		Shunt	Output 75mV
		Hall Component	Output 0~20mA, 4~20mA, 0~5V, 0~10V
		Consumption	$\leq 1mW$
Overload		1.2 times (continuous), 2 times during 1s	
Precision		0.5 class	
Function	Display	LED, LCD	
	Communication	RS485, Modbus-RTU protocol	
	Alarm	1 channel relay output: 2A/30VDC or 2A/250VAC	
	Analog	DC4~20mA, DC0~20mA (load < 600Ω), DC0~5V (load > 1kΩ) programmable	
	Switching value	input(DI)	Dry contact input, with insert power, optocoupler isolation
		output(DO)	Opening passive relay contact, 2A/30VDC or 2A/250VAC
Power supply	Voltage	DC36~48V, DC110~350V, AC85~265V (Please indicate when order)	
	Consumption	$\leq 2W$	
Isolation resistance		$\geq 100M\Omega$	
Isolation		3kV/1min(RMS) ( inputs / power, outputs / power)	
MTBN		$\geq 50000h$	
Environment	Temperature	LCD: -10C~+45C; LED: -10C~+55C Storage: -20C~+70C	
	Humidity	$\leq 93\%RH$ , no condensation, no corrosive gas	
	Altitude	$\leq 2500m$	

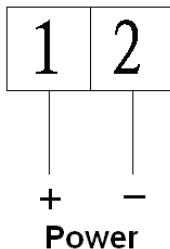
### 3.Specification

Type	Function	Outline	Option
PZ72-DU	DC voltmeter	72x72mm	1.RS485 (/C)
PZ72-DI	DC ammeter	LED display	2.One analog output (/M )
PZ72-DE	DC voltage, current, power, energy	72x72mm	3.Analog output+RS485 (/MC)
PZ72L-DU	DC voltage	LCD display	4.RS485+ 2DI (/KC)
PZ72L-DI	DC current	48x96mm	5.RS485 + 2DI2DO (/KC)
PZ72L-DE	DC voltage, current, power, energy	LED display	
PZ72-DU	DC voltmeter		
PZ72-DI	DC ammeter		
PZ72-DE	DC voltage, current, power, energy		

Note: /J means one relay output (multiplex with secondly switching value)

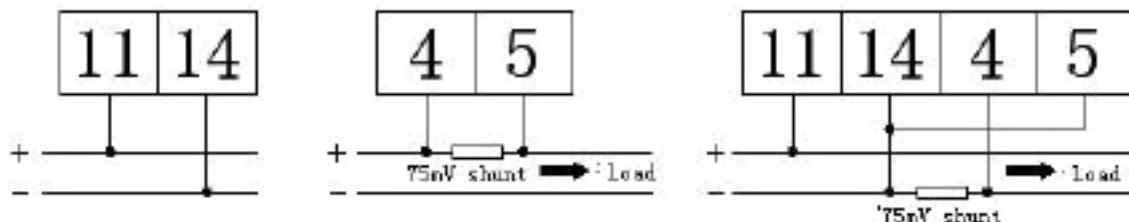
### 4. Wiring

#### 4.5.1 power



#### 4.5.2 singal input

- Input directly

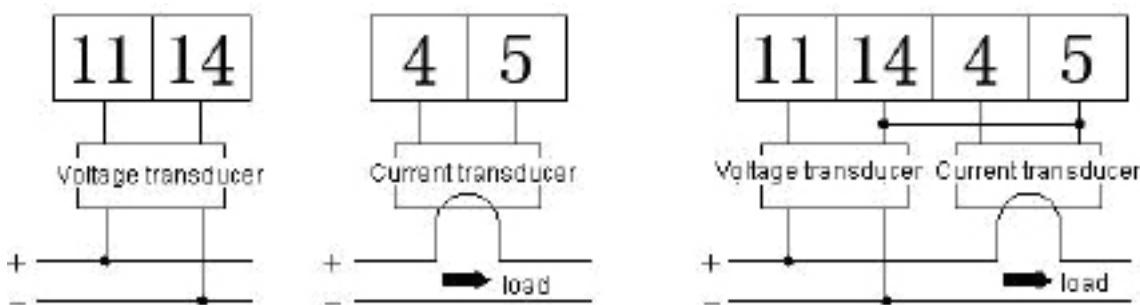


Voltage input

Current input

Voltage, current input

- Connected isolation DC shunt



### 5. Order example

When your order, please inform us the range of your measuring and the options.

For example:

Need the DC Power Meter, input DC10A, 48V, auxiliary power 48VDC, LCD display, with RS485

The product type is **PZ72L-DE/C (48V, 10A, Power 48VDC)**