

## PSIP787/789 Process multimeter

PSIP 787  
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- Process Meter is a handheld, battery-operated tool for measuring electrical parameters. It has all the features of a digital multimeter (besides the feature of RTD and TC), it could also output signals of direct voltage, current, resistance, temperature and frequency as well.
- Auto/manual range switch, Measure value display hold
- The thermocouple high accuracy cold-end can auto offset
- Panel auto calibrated
- The function of auto close backlight and auto power-off
- Large LCD include white LED backlight
- It is easy to operation by user, cabinet and solid adapt to be used at locale

## Technical data

Measuring function	Range	Measuring range	Resolving power	Accuracy	Remark
DC Voltage	4V	-4.000V~4.000V	1mV	0.2%+4	input impedance: 10MΩ
	40V	-40.00V~40.00V	0.01V	0.2%+4	
	400V	-400.0V~400.0V	0.1V	0.2%+4	
	400mV	-400.0mV~400.0mV	0.1mV	0.2%+4	
AC Voltage (40Hz~500Hz)	4V	0~4.000V	1mV	1%+4	input impedance: 10MΩ <100pF
	40V	0~40.00V	0.01V	0.5%+4	
	400V	0~400.0V	0.1V	0.5%+4	
	400mV	0~400.0mV~40.00mV	0.01mV	0.5%+6	
DC Mv Voltage	400mV	-400.0mV~400.0mV	0.1mV	0.2%+4	input impedance: 10MΩ
	400Ω	0~400.0Ω	0.1Ω	0.2%+4	
	4KΩ	0~4.000 KΩ	1Ω	0.2%+4	
	40KΩ	0~40.00KΩ	0.01KΩ	0.2%+4	
OHM	400KΩ	0~400.0KΩ	0.1KΩ	0.2%+4	Plough voltage: 0.4V not including the accuracy of down-lead resistance
	4MΩ	0~4.000MΩ	1KΩ	0.2%+4	
	40MΩ	0~40.00MΩ	0.01MΩ	1%+4	
	40mA	-40.00mA~40.00mA	0.01mA	0.2%+4	
DC Current	400mA	-400.0mA~400.0mA	0.1mA	0.5%+4	input impedance: 1Ω
	40mA	0~40.00mA	0.01mA	0.5%+4	
	400μA	0~400.0μA	0.1μA	0.5%+4	
	4000μA	0~4000μA	1μA	0.5%+4	
AC Current (40Hz~200Hz)	500Hz	0~50.0Hz	0.01Hz	0.1%+3	
	50Hz	0~500.0Hz	0.1Hz	0.1%+3	
	5KHz	0~5.000KHz	1Hz	0.1%+3	
	50KHz	0~50.00KHz	0.01KHz	0.1%+3	
Frequency	100KHz	0~100.0KHz	0.1KHz	0.1%+3	
	1V	0.1V~999V	0.1%	1%	
	1V	0.001V	0.001V	10%	
	Continuity test	<50ΩBB	0.1Ω	0.5%+3(≤100°C) 0.5%+2(>100°C)	
Thermocouple*	R	-40°C~1760°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	Adopt ITS-90 thermometric scale not including the accuracy of RJC error RJC error:±2°C
	S	-20°C~1760°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	
	K	-200°C~950°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	
	E	-200°C~500°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	
Thermo resistance*	J	-200°C~700°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	PT100-385 thermometric scale, not including the accuracy of down-lead resistance
	T	-200°C~400°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	
	N	-200°C~1000°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	
	B	400°C~1800°C	1°C	0.5%+2(≤100°C) 0.5%+1(>100°C)	

## Output Function

Function	Range	Setting range	Resolving power	Accuracy	Remark
OMH*	400Ω	0~400.0Ω	0.1Ω	0.2%+4	±1mA current not including the accuracy of down-lead resistance
78DCmV	500mV	-50.00mV~550.00mV	0.1mV	0.5%+6	Max output current: 5mA
79DCmV	100mV	-10.00mV~110.00mV	0.01mV	0.2%+4	Max output current: 5mA
DCV	5V	-0.5000V~5.5000V	1mV	0.2%+4	Max output current: 5mA
FREQ	100Hz	1.0Hz~110.0Hz	0.1Hz	0.2%+2	50% Duty cycle 5Vp-p
	1kHz	0.100kHz~1.100kHz	0.001kHz	0.2%+2	
	10kHz	1.0kHz~11.0kHz	0.1kHz	0.2%+2	
	100kHz	0~22.000kHz	0.01kHz	0.2%+4	
Analog transducer XMT	20mA	0~22.000mA	0.01mA	0.2%+4	Outside power supply 25V when 20 mA 1KΩ resistance Outside power supply 15V when 20 mA 400Ω resistance
	20mA	0~22.000mA	0.01mA	0.2%+4	
	R	-40°C~1760°C	1°C	0.5%+3(≤100°C) 0.5%+2(>100°C)	
	S	-20°C~1760°C	1°C	0.5%+3(≤100°C) 0.5%+2(>100°C)	
Thermocouple*	K	-200°C~1370°C	0.1°C	0.5%+20(≤-100°C) 0.5%+10(>-100°C)	Adopt ITS-90 thermometric scale not including the accuracy of RJC error RJC error:±2°C
	E	-200°C~1000°C	0.1°C	0.5%+20(≤-100°C) 0.5%+10(>-100°C)	
	J	-200°C~1200°C	0.1°C	0.5%+20(≤-100°C) 0.5%+10(>-100°C)	
	T	-200°C~400°C	0.1°C	0.5%+20(≤-100°C) 0.5%+10(>-100°C)	
Thermo resistance*	N	-200°C~1300°C	1°C	0.5%+20(≤-100°C) 0.5%+10(>-100°C)	PT100-385 thermometric scale±0.1mA not including the accuracy of down-lead resistance
	B	400°C~1800°C	1°C	0.5%+20(≤-100°C) 0.5%+10(>-100°C)	
	Pl100	-200°C~850°C	0.1°C	0.2%+6	
	Cu50	-50°C~150°C	0.1°C	0.2%+6	

Note : \* only for model 789