

NEW!

Processmeter is a handheld, battery-operated tool for measuring & simulation of electrical parameters. It has all the features of a digital multimeter (including the feature of RTD and TC) and it could also output signals. All in one unit!

Measure and simulate equipment:

- > Controller, PLC & Control system
- > Valve actuators & I/P-converter
- > Loggers, Recorders
- > Alarm system etc.

Available outputs:

- > Thermocouple (R,S,B,E,K,J,T,N,L,U)
- > DC voltage, DC current, Sink/Source mode
- > Resistance
- > RTD (Pt100/Cu50)
- > Frequency, Pulse

Available inputs:

- > Thermocouple (R,S,B,E,K,J,T,N,L,U)
- > DC voltage, DC current
- > AC voltage, AC current
- > Resistance
- > RTD (Pt100/Cu50)
- > Frequency, Pulse

Make sure you have the right in/outputs:

- > Temperature, Pressure, Flow, Valve position etc.
- > Simulate 2-wire transmitters in current sink mode.

Standard Accessories:

- > Instrument Bag with:
- > One set of Industrial testing Lead with alligator clips
- > User's Manual CD

Options:

- > Charger with battery kit
- > Battery pack 24VDC for 2-wire application



Specifications:

All the specifications apply to +18°C to +28°C, 10% to 70%RH unless stated otherwise.

All specifications assume a 5- minute warm- up period.

Standard specifications are valid for one year.

Note: "Counts" refers to the number of increments or decrements of the least significant digit.

DC Voltage Measurement:

Range(DC V)	Resolution	Accuracy,±(% of reading +counts)
4.000V	0.001V	0.2%+4
40.00V	0.01V	0.2%+4
400.0V	0.1V	0.2%+4
Measuring Impedance:10 MΩ(nominal),<100pF Common mode rejection ratio: 50Hz or 60Hz > 100dB Normal mode rejection ratio: 50Hz or 60Hz > 45dB Overvoltage protection: 600Vp		

DC mV Measurement:

Range(DC mV)	Resolution	Accuracy,±(%reading +counts)
40.00mV	0.01 mV	0.5%+6
400.0mV	0.1 mV	0.2%+4
Measuring Impedance: 10 MΩ(nominal) Overvoltage protection: 600Vp		

TC Measurement:

Range(type)	Set Range	Resolution	Accuracy±(%reading +counts)
R	-40~1760°C	1°C	0.5%+3 (≤100°C) 0.5%+2 (>100°C)
S	-20~1760°C	1°C	0.5%+3 (≤100°C) 0.5%+2 (>100°C)
B	400~1800°C	1°C	0.5%+3 (≤600°C) 0.5%+2 (>600°C)
E	-200~500°C	1°C	0.5%+2 (≤-100°C) 0.5%+1 (>-100°C)
K	-200~950°C	1°C	0.5%+2 (≤-100°C) 0.5%+1 (>-100°C)
J	-200~700°C	1°C	0.5%+2 (≤-100°C) 0.5%+1 (>-100°C)
T	-200~400°C	1°C	0.5%+2 (≤-100°C) 0.5%+1 (>-100°C)
N	-200~1000°C	1°C	0.5%+2 (≤-100°C) 0.5%+1 (>-100°C)
By using ITS-90 temperature scale Note: The accuracy does not include the error of internal temperature compensation caused by a sensor. The range of the internal temperature compensation sensor is ± 2°C.			

AC Voltage Measurement:

Range(ACV)	Resolution	Accuracy,±(%reading +counts) 40~400Hz
400.0mV	0.1mV	1.0%+4
4.000V	0.001V	0.5%+4
40.00V	0.01V	0.5%+4
400.0V	0.1V	0.5%+4
Specifications are valid from 5% to 100% of amplitude range 400mV is only confined to manual range AC conversion: average value Measuring Impedance: 10 MΩ(nominal), <100pF Common mode rejection ratio: 50Hz or 60Hz > 100dB Overvoltage protection: 600Vp		

DC Current Measurement:

Range(DC mA)	Resolution	Accuracy,±(%reading +counts)
40.00mA	0.01 mA	0.2%+4
400.0 mA	0.1 mA	0.2%+4
Overload protection: 0.5A,250V fast-blow fuse Measuring Impedance: 1Ω		

AC Current Measurement:

Range(AC mA)	Resolution	Accuracy,±(%reading +counts) 40~400Hz
40.00mA	0.01 mA	0.5%+4
400.0 mA	0.1 mA	0.5%+4
Specifications are valid from 5% to 100% of amplitude range Overload protection: 0.5A,250V fast-blow fuse Measuring Impedance: 1Ω		

Resistance Measurement:

Range	Resolution	Accuracy,±(%reading +counts)
400.0Ω	0.1Ω	0.2%+4
4.000kΩ	0.001kΩ	0.2%+4
40.00kΩ	0.01kΩ	0.2%+4
400.0kΩ	0.1kΩ	0.2%+4
4.000MΩ	0.001 MΩ	0.5%+4
40.00 MΩ	0.01 MΩ	1%+4
Open circuit voltage:0.4v Guide lead resistance is excluded in the accuracy Overvoltage protection: 600Vp		

RTD Measurement:

Range(type)	Input Range	Resolution	Accuracy,±(%reading +counts)
Pt100	-200~700°C	1°C	0.5%+2
Cu50	-50~150°C	1°C	0.5%+4
By using Pt100-385 temperature scale Measuring current 1 mA Note: attached lead resistance is excluded			

Frequency Count Accuracy:

Range	Resolution	Accuracy,±(%reading +counts)
50.00Hz	0.01Hz	0.1%+3
500.0Hz	0.1Hz	0.1%+3
5.000KHz	1Hz	0.1%+3
50.00KHz	0.01KHz	0.1%+3
100.0KHz	0.1KHz	0.1%+3
Display updates 3 times/second (at >10Hz)		

Diode Test and Continuity Test:

Diode test indication:

Displays voltage drop across device, open circuit voltage: 1.1v-1.6v; short circuit current :<0.2 mA (typical value). Accuracy± (2%reading +1count)

Continuity test indication:

Continuous audible tone for test resistance<50

Open circuit voltage: <0.45v

Short circuit current:130µA typical

Overload protection: 600V(peak)

Basic Technical Specification of Output:

(applicable to temperature range from 18 to 28 °C, 10% to 70%RH ,within one year after calibration).

Function	Range	Set Range	Resolution	Accuracy	Remark
OHM	400.0Ω	0 to 400.0Ω	0.1Ω	0.5+4	1mA exciting current Without accessory lead resistance
DC mV	100.00mV	-10.00mV to 10.00mV	0.01mV	0.5+4	Max. output current 5mA
DC V	5.0000V	-0.5000V to 5.5000V	0.1mV	0.2+4	Max. output current 5mA
FREQ	100.0Hz	1.0Hz to 110.0Hz	0.1Hz	0.2+2	Square-wave 50% duty cycle ratio 5V p-p
	1.000KHz	0.100KHz to 1.100KHz	10.0KHz	0.2+2	
	10.0KHz	1.0KHz to 11.0KHz	0.1KHz	0.2+2	
XMT	-20.000mA	0 to -22.000mA	0.001mA	0.2+4	External power supply: 28V Max. load:1kΩ at 20mA
DC mA	20.000mA	0 to 22.000mA	0.001mA	0.2+4	Internal power supply: 15V Max. load:500Ω at 20mA
RTD	Pt100	-200.0 to 850.0	0.1°C	0.5+6	By using Pt100-385 temperature Without accessory lead resistance
	Cu50	-50.0 to 150.0			

Basic Technical Specification of Output(cont.)

Function	Range	Set Range	Resolution	Accuracy	Remark
TC	R	-40 to 1760	1°C	0.5%+3 (≤100°C) 0.5%+2 (>100°C)	By using ITS-90 temperature Note: The accuracy does not include the error of internal temperature compensation caused by a sensor.
	S	-20 to 1760	0.1°C	0.5%+20 (≤-100°C) 0.5%+10 (>-100°C)	
	K	-200.0 to 1370.0			
	E	-200.0 to 1000.0			
	J	-200.0 to 200.0			
	T	-200.0 to 400.0			
	N	-200.0 to 1300.0			
B	-40 to 1760	1°C	0.5%+3 (≤600°C) 0.5%+2 (>600°C)		
Maximum voltage applied between any output jack and earth ground :30 V DC Fuse-protection for output jacks: 63mA,250V fast-blow fuse					

General Specifications:

- Power supply: 6V batteries(4×1.5 V alkaline AAA batteries or 4×1.5 V Ni-MH AAA batteries)
- Maximum Voltage:600Vp (Maximum Voltage between all input jacks and earth ground)
30V DC (Maximum Voltage between all output jacks and earth ground)
- Operating temperature: 0°C-50°C
- Operating relative humidity:≤ 80% RH
- Storage temperature: -10 °C-55 °C
- Storage humidity:≤ 90%RH
- Size : 205 ×95× 42 mm (plus protector)
- Weight: about 500g (plus protector)
- Accessories: a copy of users manual, a set of CF-733370 industrial test lead (with alligator clips)
and two 63mA/250 fast-blow fuses
- Options: battery charger(VCCHG)
- Safety: complied with IEC61010 terms
(Safety Standard issued by International Electro- technical Commission)