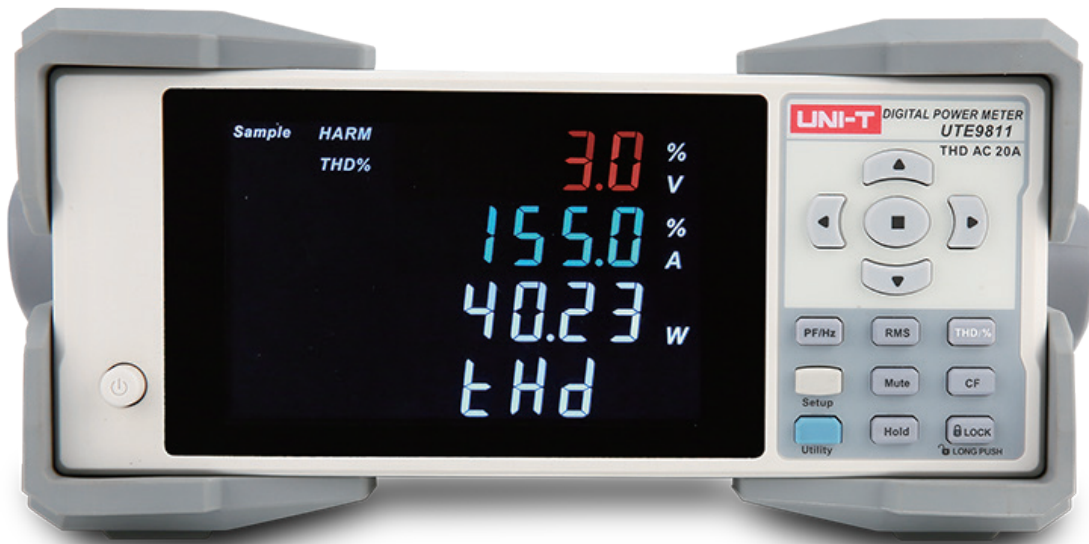


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Data Sheet

UTE9800 Series Power Meters



Main Features

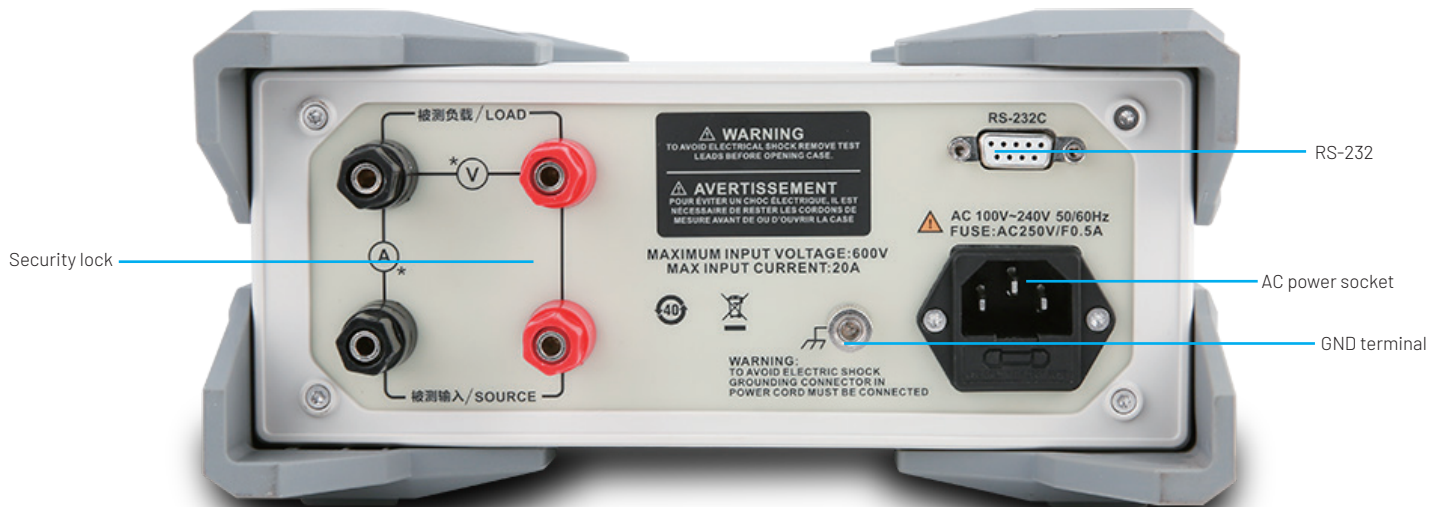
UTE9802:

- VA LCD display, intuitive reading, using high-speed A / D converter and 32-bit MCU operation.
- Multiple windows display voltage, current, power, power factor / frequency at the same time, with stable and fast measurement.
- Automatic switching of voltage and current range to improve the measurement accuracy.
- The measurement accuracy is not affected by waveform, high reliability and long service life.
- AC / DC type is more suitable for the measurement of half wave rectifier. True RMS (AC + DC).
- Set the upper and lower limit alarm parameters of current and power, and provide audible and visual alarm.
- With RS-232 and RS-485 serial communication interface, it is convenient to communicate with computer or PLC.
- Communication address: 1 ~ 32, baud rate: 4800、 9600、 19200

UTE9811:

- VA LCD display, intuitive reading, using high-speed DSP processor + phase-locked loop (PLL) for operation.
- Multiple windows simultaneously display the measured voltage, current, power, power factor, frequency, voltage crest factor and current crest factor.
- Phase locked loop (PLL) synchronization method, and the maximum harmonic analysis is 50 times.
- Automatic switching of voltage and current range to improve the measurement accuracy.
- High reliability and long service life.
- Set the upper and lower limit alarm parameters of current and power, and provide audible and visual alarm.
- With RS-232 and RS-485 serial communication interface, it is convenient to communicate with computer or PLC.
- Communication address: 1 ~ 32, baud rate: 9600、 19200、 38400、 115200.

Power Meter Panel



Product Introduction

UTE9800 series digital power meter is an economical and portable measuring instrument. It is a multifunctional measuring instrument integrating voltage, current, power, power factor and frequency. It has high-cost performance and is widely applicable to the application needs of production, testing, quality inspection, scientific research and other fields.

Four windows display

Four windows simultaneously display voltage, current, power, power factor / frequency, current crest factor and voltage crest factor. 5-digit high-precision display.



Harmonic analysis

UTE9811 adopts phase locked loop (PLL) synchronization method, and the maximum harmonic analysis is 50 times.



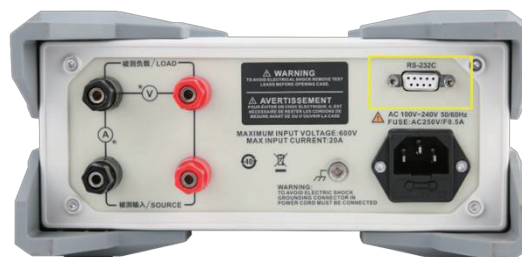
True RMS

UTE9802 true RMS measurement. Can measure AC, DC, AC+DC. Provide you with the most accurate measurement results



Remote control

Equipped with RS232 communication interface. It can easily communicate with computer or PLC. Provide remote control function.



Limit alarm

The upper and lower limit alarm parameters of current and power can be set freely. It has auditory and visual alarm indication and can set delay alarm. For batch inspection, improve efficiency.



Test networking

Optional test cable, easy to build measurement environment.



Technical Specification

Model		UTE9802	UTE9802
Display		VA LCD, 5 digits, four windows	VA LCD, 5 digits, four windows
Display update rate		About 3 times / s	Normal mode: about 2 times / s Harmonic analysis mode: 2 s / time
Measurement object		V, A, W, PF/HZ	V, A, W, PF/HZ/THD/ THD%/CF
Measurement method		AC DC AC+DC(T-RMS)	AC
Voltage range		3.0V-600V(75V/150V/300V/600V)	3.0V-600V(auto-range)
Voltage accuracy		± (0.4% reading+ 0.1% range+1digit)	± (0.4% reading+ 0.1% range+1digit)
Voltage resolution		0.01V/0.1V	0.1V
Current range		0.5mA-20.0A(500mA/2A/8A/20A)	5.0mA-20.0A (auto-range)
Current accuracy		± (0.4% reading+ 0.1% range+1digit)	± (0.4% reading+ 0.1% range+1digit)
Current resolution		0.0001A /0.001A/0.01A	0.001A/0.01A
Range switching		Auto / manual	Auto
Power range		0.001W-12kW	1W-12kW
Power accuracy		± (0.4% reading+ 0.1% range+1digit)	± (0.4% reading+ 0.1% range+1digit)
Power Resolution		0.001W/0.01W/0.1W/1W	0.01W/0.1W/1W
Power factor range		-1.000-1.000	-1.000-1.000
Power factor accuracy		±(0.004 + 0.0001reading+1 digit)	±(0.004 + 0.0001reading+1 digit)
Frequency range		Base frequency : 40Hz~130Hz,BW: 5kHz	Base frequency: 40Hz-70Hz, BW: 5kHz
Frequency accuracy		±(0.1% reading+1digit)	±(0.1% reading+1digit)
Automatic range	Automatic range	≥110% rated range(CF < 2)	≥110% rated range(CF < 2)
switching	Range reduction	≤30% rated range(CF < 2)	≤30% rated range(CF < 2)
Harmonic analysis times		/	1-50 times
Harmonic accuracy		/	±(0.3 % range+ 5 % reading)
Preheating time		>30min	>30min
Peak current		Maximum display 24A	Maximum display 24A
Maximum input allowed for connection		Voltage 660V, current 22A	Voltage 660V, current 22A
Instantaneous allowable maximum input		1000V,40A(1s)	1000V,40A(1s)
Input impedance		Voltage:>1M Ω, current:<0.02Ω	Voltage:>1M Ω, current:<0.02Ω
Upper and lower limit function		P Hi(Power high)	
		P Lo(Power low)	
		A Hi(Current high)	
		A Lo(Current low)	
Interface		RS232(DB9; 2pin: TX- 3pin: RX- 5pin: GND) RS485(DB9; 8pin: A, 9pin: B)	
Baud rate		4800、9600、19200 optional	9600、19200、38400、115200 optional
Display hold		yes	
Mute		yes	
Key lock		yes	
Power		AC 86V-265V ,50/60Hz	
Precision environment		18 C-28 C, 30%-75% RH	
work environment		5 C-40 C, 20%-80%RH (non condensing)	
Storage environment		-10 C-50 C, <80% RH non condensing	
Working altitude		≤2000m	
Product Color		Grey	
Weight		3.2kg	
Size		214mm×88.2mm×340mm	
Standard quantity per carton		2	
Standard carton size		405mm*330m*395mm	

Standard accessories

Power cable	Fits the standard of destination country x1
Communication cable	RS232 Communication cable x1

Optional accessories

UTE-L10A	10A national standard three plug to banana head power cable x1
UTE-L16C	16A test cable with alligator clip x1
UTE-L16A	16A national standard three plug to banana head power cable x1

Warranty

Three-years warranty, excluding probes and accessories.

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UNI-T group maintains a wide products category includes Digital Test & Measurement instruments, Field Testing Meter, Infrared thermal imaging products. As early as 2008, we continue to introduce self-developed Digital Test and Measurement instruments to the market and have made remarkable achievements. At present, we have formed a variety of product lines of Oscilloscope, AWG, Spectrum Analyzer, Bench Multi-meter, Power Supply, DC Load, Power Meter, LCR Meter, Micro Ohm Meter and Data logger. We have separated instruments sub-sites, instruments.uni-trend.com, on the basis of the original website www.uni-trend.com, in order to be more targeted to provide customers with better service and value.

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