UNI-T®

UT283A Single Phase Power Quality Analyzer

CE RoHS Electrical Safety 1000V CAT II Electrical Safety 600V CAT III

UT283A is a handheld multi-functional device designed to measure and analyze single-phase power systems. This portable S class device can measure amplitude, phase, harmonics, current, voltage, then record results in SD card for further analysis and export. This product is suitable for professionals working in electrical power, medical, transportation, telecommunication, and other industrial areas.

- Trend/event capture
- Harmonics/inrush current measurement
- File management through USB interface
- Flick measure (PST/PLT values)
- User friendly interface
- Multimeter functions
- Scope functions including waveform display
- 3.5 inches 64K color TFT LCD display
- THD (Total Harmonic Distortion) function
- Long-term monitoring

▌ SPECIFICATIONS

	Range	UT283A
Voltage (V)	10V~1000V AC/DC	±0.5%Udin
AC current (A)	10A/100A/1000A	±0.5%f.s.
Frequency (Hz)	40~70Hz	±50mHz
Power (W)	>15%S	±1%S
Power factor	0~1	±0.02
Energy (Wh)	0~9999MWh	±1.5%rdg
Crest factor	1 to 10	±5%
Voltage harmonics or inter-harmonics	Um≥3%Unom (1~51th, step 0.5th)	±5%Urms
	Um<3%Unom (1~51th, step 0.5th)	±0.15%Unom
Current harmonics or inter-harmonics	Im≥10%Inom (1~51th, step 0.5th)	±5%Irms
	Im<10%Inom (1~51th, step 0.5th)	±0.5%Inom
Power harmonics	(1~51th, step 1th)	Calculated based on voltage and current amplitude and phase accuracy
Transients	±6000V Peak, Fsample=2MHz	±5%rdg.±5%f.s
Dip/swell/interrupt	0~1000V AC	Udin±1 %
AC inrush current (A)	10A/100A/1000A	±1%f.s
Resistance (Ω)	600Ω/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ	±(1%+3)
Capacitance (F)	60nF/600nF/6µF/60µF/600µF	±(4%+20)
Features		
True RMS		√
Harmonic analysis	Up to 51th	√
Flick measure	10 minutes, PST and PLT values	√
Voltage ratio		√
Current ratio		√
Event capture		√
Trend capture		√
Data logging	8GB	√
USB interface		√
Backlight adjustment		√
Low battery indication		√
Input protection		√

▌ GENERAL CHARACTERISTICS

Power	Li-ion battery: 7.4V 3600mAh
Display	70mm x 52mm; 3.5 inches 64K color TFT LCD (320 x 240)
Product color	Red and grey
Product net weight	808.4g
Product size	199mm x 118mm x 49mm
Standard accessories	Power adaptor, power cord, test leads, test probes, alligator clips, current clamp (10A/100A/1000A), USB interface cable, PC software CD, SD card (8GB)
Standard individual packing	Gift box, carrying bag, English manual
Standard quantity per carton	4pcs
Standard carton measurement	665mm x 350mm x 305mm
Standard carton gross weight	24.2kg