

TH0195 AC-DC Voltage Measuring Standard Instrument



1. Summary

TH0195 is a benchtop precision AC-DC voltage measuring standard instrument that enables AC voltage measurement with a 7 and half digit multimeter. This instrument accurately measures small voltage signals from sensors/transformers (current output type can be converted to voltage by resistance), coaxial shunts, and other equipment, to achieve AC and DC high current or high voltage conversion measurement.

2. Features

- Voltage measurement range: 10 mV ~ 7 V@AC, 10 mV ~ 10 V@DC
- Frequency range: DC, 1 mHz ~ 10 kHz.
- Measurement accuracy: $\pm (0.003\% * \text{reading} + 0.001\% * \text{range}) @ 3V$.
- 2nd ~ 128th harmonic measurement, DC ripple measurement function.

3. Applications

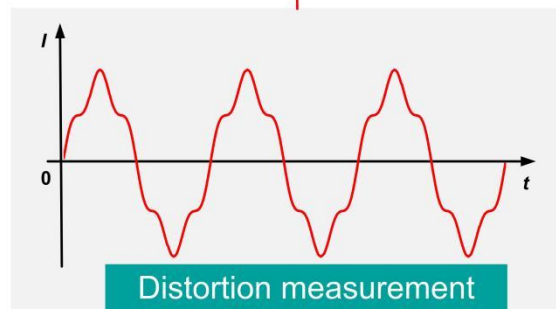
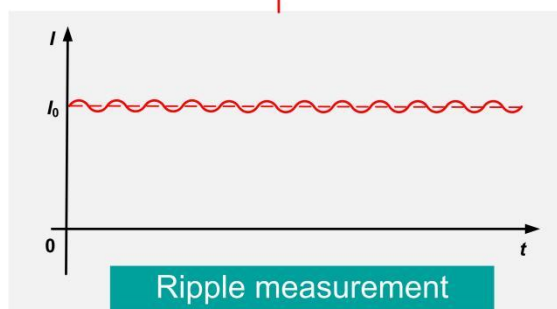
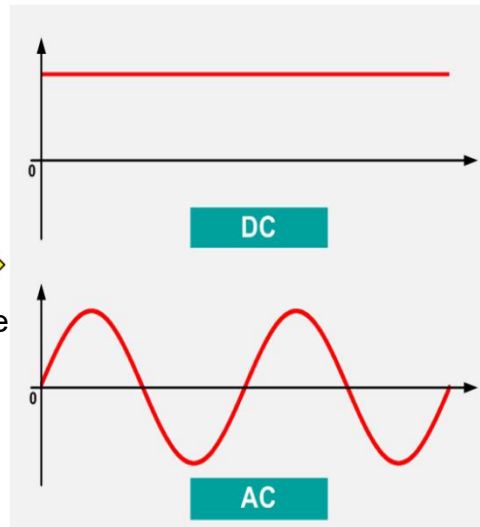
- Accurate measurement of AC and DC voltage and current on site
- Calibrate AC and DC voltage standard sources/meters
- Calibrate the AC and DC current standard source/meter

4. Characteristics

☆ Measure ripple or distortion



测量
measure



- The instrument supports DC, AC measurement mode, AC frequency range: 10 Hz ~ 10 kHz.
- **DC ripple measurement:** When measuring DC signals, their ripple coefficients are displayed synchronously with a measurement bandwidth of up to 1 kHz.
- **Cross-current ripple measurement:** When measuring AC signals, the distortion degree is displayed synchronously, which supports the measurement of the 2nd ~ 128th harmonic.

5. Specifications

Voltage range	30 mV _{pk} 、100 mV _{pk} 、300 mV _{pk} 、1 V _{pk} 、3 V _{pk} 、10 V _{pk}
Measuring range	AC: 10 mV~7 V (rms) DC: 10 mV~10 V
Measurement frequency	DC & 1 mHz~10 kHz
Measurement accuracy	± (0.003% * reading + 0.001% * range) @ 3 V range
Input protection	≥ 220 V

6. General Specifications

Power supply	Mains power supply: AC 85 V~264 V / 47 Hz~63 Hz Battery powered
Temperature performance	Working temperature: 18°C ~ 28°C Storage temperature: -10°C ~ 55°C
Humidity performance	Operating humidity:(20%~85%) R·H, no condensation Storage humidity: <95% R·H, no condensation
Instrument size	215 mm(W)×320 mm(D)×89 mm(H), (feet are not included)
touch screen	4.3 inch LCD display screen
Input interface	BNC interface
Communication interface	RS232×1、USB×1、LAN×1
Data transmission	1 mHz~10 Hz: Digital sequence measured by voltage digitization module, maximum transmission speed 100 kSPS; 10 Hz~10 kHz: voltage amplitude