



GDDO-20C AC/DC Electric Meter Calibration Device



General Information

GDDO-20C AC/DC Electric Meter Calibration Device is used to detect basic error of various power frequency electric instruments in power systems, including voltmeter, ammeter, wattmeter, ohmmeter, single phase & three phase AC energy meters (optional) and basic error of DC volt-meter and ammeter.

For meter's part, it takes high precision power frequency AC collector as core technology, which consists of digital signal processor (DSP) and 16-digit high speed analog-digital converter; For signal source, it uses DSP and 16-digit high speed analog-digital converter to form signal source that produces sine wave signal and distortion wave signal.

Features

- Accuracy class of 0.05. When AC voltage, AC current and active power are measured, the device is equipped with a digital/frequency converter (DFC) with a working frequency higher than 60kHz and multiple current ranges, so high accuracy is guaranteed.
- The distortion wave of 2~31 times, number, times and amplitude of harmonics, and phase of harmonic to fundamental wave can be all programmed.
- 6.5-inch color TFT LCD screen, clear and bright display.
- With RS232 communication port.
- With a large capacity non-volatile memory, can store test results of 300 meters under test, support data view and data upload function.
- With good reliability, easy to operate.

Specification

Power frequency AC output	
Voltage range (V)	50, 100, 200, 400, 600 (800V is optional), Max. output capacity 20VA
Current range (A)	0.5, 1, 2.5, 5, 10, 20, Max. output capacity 20VA
Voltage adjustment range	0~130%, fineness adjustment 5*10
Current adjustment range	0~130%, fineness adjustment 5*10

Accuracy of voltage, current, active power and energy	0.05%
Accuracy of reactive power and energy	0.1%
Phase accuracy of current to phase voltage	0.05°
Frequency	Adjustment range: 45~65Hz, Fineness adjustment: 0.001Hz Setting value accuracy: 0.01Hz
Phase	Adjustment range: 0~359.99° Fineness adjustment: 0.01° Setting value accuracy: 0.05°
Distortion degree of voltage and current output waveform	≤0.3%
Stability of voltage, current and power output	≤0.01%/60s (peak-to-peak value)

Harmonics	<p>2~31 times</p> <p>Amplitude: 0~20%</p> <p>Phase fineness: $0.01^\circ \times N$ ("N" refers to harmonic order)</p>
DC output	
Voltage range (V)	0.075, 75, 150, 300, 500, 1000, Max. output capacity 20W
Current range (A)	0.5, 1, 2.5, 5, 10, 20, Max. output capacity 20W
Adjustment range of voltage and current	0~120% (not including 1000V), fineness adjustment 5×10
Stability of voltage and current output	$\leq 0.01\%/60s$ (peak-to-peak value)
Accuracy of voltage setting value	0.05%
Accuracy of current setting value	0.1%
Accuracy at 75mV output (Load $\geq 5\Omega$)	0.1%
General parameters	
Power supply	Single phase 220V \pm 10%, 50Hz \pm 5%

Use conditions	20°C±10°C, ≤85%RH
Dimension	460*460*175mm
Weight	About 20kg

Packing list

Main unit	1 set
Aluminum alloy box	1 set
Power cord	1 pc
Test line with connector	1 pc
Test line (DC 75mV)	1 pc
Test line for electric energy pulse	1 pc
Communication cable	1 pc
Photoelectric collector	1 pc
User's guide	1 copy
Factory test report	1 copy