



## GDYB-S18 Three-phase Energy Meter Test System



### Product Description

GDYB series Meter Test System is used to measure various kinds of single/three phase meters of 0.1% and below. It has good appearance, complete functions and excellent performance .

### Features

- Compact design, the meter rack of the testing equipment and the desk frame are all made of special aluminum alloy and the desk face-plate is made of fireproof and heatproof fiber material.
- Easy to use, both keyboard and PC operation are available.

- Advanced automation. User only needs to put on meters, adjust the photoelectric sampler and set the parameters in good condition, then all the test items, including pre-heating, actuation and false actuation tests, standard deviation test, basic error test are all controlled by PC by one test. The procedure of meter calibration can be user-defined.
- Photoelectric sampler can realize three-dimensional adjustment. It can not only sample the turn-plate signal of the rotary meter but also receive the strobe signal of the electronic meter.
- The error processing system can receive signal from the photoelectric sampler and output pulse of the insert type electronic meter, and high frequency pulse signal of standard meter.
- Meters in same type(same phase line, rated voltage, calibrated current) but different constant (at most 3 kinds) can be test at same time.
- Test RS485 communication function of multi-functional meter, required error and clocking error (Time signal output is necessary).
- Locate the mark area of rotary meter automatically, which enables easier false actuation tests.
- Superimposing 2-21 harmonics in fundamental wave of power frequency, harmonic amplitude and phase can be set according the requirements. Also harmonic analysis and draw waveform can be performed for output components.
- Auto testing on every unit voltage, current, power stability and three phase total power stability.
- High stability and reliability, which can provide strong output power. Voltage (current) loop can take load of any type.
- The testing equipment is provided with complete malfunction checking, locating, protecting and alarming functions to avoid damaging of the bench resulted from wrong manual wiring or operating.

- PC software developed with Delphi for Windows 95 provides fast and effective equipment control and data checking, it also provides complete functions, such as report printing, quantity counting and assets maintaining

## Specification

- Accuracy level: 0.1%
- Output voltage: 3\*100V/57.7V Y      3\*100V Δ

3\*380V/220V Y      3\*380V Δ

Regulating range: 0-120% consecutively adjustable

Regulating accuracy: better than 0.01%

Special voltage range can be setup according to actual order.

- Current range: 0.1A, 0.25A, 0.5A, 1A, 2.5A, 5A, 10A, 20A, 50A, 100A

Regulating range: 0-120% consecutively adjustable

Regulating accuracy: better than 0.01%

- Output power: (voltage loop) GDYB-S18 800VA

(current loop) GDYB-S18 1500VA

- Stability of output voltage, current and power:

≤0.05%/120S      PF=1 (level 0.1type)

- Wave distortion of output voltage and current: ≤0.5%
- Symmetry of three phase: better than 120°+0.3°
- Frequency range: 45Hz-65Hz      regulating accuracy: 0.1 Hz

- Phase shifting range:  $-180.0^{\circ}$ - $180.0^{\circ}$  regulating accuracy:  $0.1^{\circ}$
- Standard crystal oscillator stability:  $\leq 10^{-7}/s$
- Indicating instruments class

Voltmeter and ammeter accuracy: level  $\pm 0.2\%$

Phase meter accuracy:  $\pm 0.5^{\circ}$

Frequency meter accuracy:  $\pm 0.1\text{Hz}$

- Maximum meters for test: 18
- Power supply:  $3 \times 220\text{V} \pm 10\%$ , 50Hz
- Maximum power consumption: 4000VA
- Working temperature:  $20 \pm 5^{\circ}\text{C}$  relative humidity:  $\leq 85\%$
- Dimensions and weight: 2500mm\*720 mm\*1900mm 350Kg