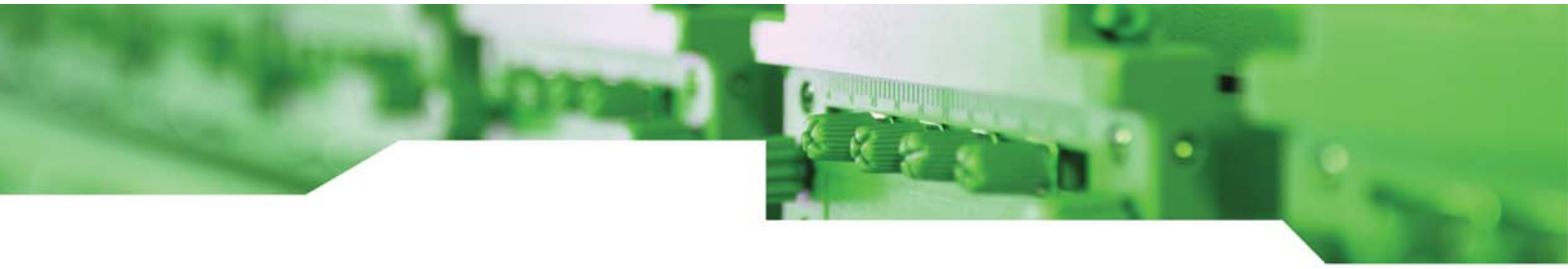

MTS-50 Three-phase Energy Meter Calibrator(50A)

MTS-50 is suitable for the measurement departments of power supply corporation, national measurement institution at all levels, and energy meter manufacturer, etc.

Main Functions

- Calibrate all kind of single/three phase electronic/inductive active and reactive energy meter;
- Automatically or single-step manually test basic error, creeping, starting, standard deviation of single/three phase energy meter, save user-defined calibrating scheme in auto calibration;
- Support variables influence tests, such as: Voltage, frequency, harmonics, reverse phase sequence, Voltage unbalance, etc.;
- Support special tests in energy meter type test, such as: phase triggering, pulse train triggering, etc. ;
- Support DLT-645 communication protocol,multi-testing of multifunction meter such as: demand indication error, demand cycle error, time slot switching error, energy error of different tariff period, etc.;
- With OCXO, daily error of energy meter can be detected;
- Output 2nd ~63rd harmonics.

Main Features

- 8 inch color touch screen, interface friendly, easy to operate;
- Equipped with RS232, Ethernet, and WiFi interface, MTS-50 can either support stand-alone operation, PC control or handy wireless terminal control;
- Communicate with tested meters thru RS-485;
- Automatically calculate the error of meter , and the related data can be downloaded thru U-disk;
- Self-protection, alarming and displaying overload location for equipment output overload, Voltage short-circuit, Current open-circuit;
- Automatically detect, diagnose and alarm for failure;
- Remotely updating online, easily achieve software updating;
- Support local calibration at users' side.

Type

- MTS-50C Three-phase Energy Meter Calibrator (50A), Class 0.05;
- MTS-50B Three-phase Energy Meter Calibrator (50A), Class 0.1.

Technical Specification

AC Voltage output	Range	100V, 220V, 380V, 660V
	Adjusting range	(0~120) %RG, RG refers to range
	Adjusting resolution	0.01%RG, 0.1%RG, 1%RG, or 10% RG
	Stability	0.01%/2min (Class 0.05), 0.02%/2min (Class 0.1)
	Distortion	≤0.2% (Non capacitive load)
	Max output load	20VA each phase
	Accuracy	0.05%RG (Class 0.05), 0.1%RG (Class 0.1)
AC Current output	Range	0.05A, 0.2A, 1A, 5A, 16.67A, 50A
	Adjusting range	(0~120) %RG, RG refers to range, similarly hereafter
	Adjusting resolution	0.01%RG, 0.1%RG, 1%RG, or 10% RG
	Stability	0.01%/2min (Class 0.05), 0.02%/2min (Class 0.1)
	Distortion	≤0.2% (Non capacitive load)
	Max output load	50VA (50A range gear)
	Accuracy	0.05%RG (Class 0.05); 0.1%RG (Class 0.1)
Power output	Power output stability	0.01%/2min(Class0.05),0.02%/2min(Class0.1)
	Active/reactive power measurement accuracy	0.05%RG
Phase output	Output adjusting range	0° ~360°
	Output adjusting resolution	10° ,1° ,0.1° ,or 0.01°
	Resolution	0.01°
	Measurement accuracy	0.05°
Power factor output	Adjusting range	−1 ~ 0 ~ +1
	Measuring resolution	0.0001
	Measurement accuracy	0.0005
Frequency output	Adjusting range	40Hz ~70Hz
	Output adjusting resolution	1Hz,0.1Hz,0.01Hz,or 0.001Hz
	Resolution	0.001Hz
	Accuracy	0.002 Hz
Harmonic setting	Harmonic order	2^{nd}~63^{rd}
	Harmonic amplitude	0~40%
	Harmonic angle	0° ~359.99°
	Harmonic set error	2^{nd}~31^{st}: ≤±0.1%,32^{nd}~63^{rd}: ≤±0.2%
Energy error measurement	Active energy basic error limit	0.05%RD(Voltage15V~660V,Current0.02A ~ 60A,PF≥0.5) 0.1%RD(Voltage15V~660V,v0.01A ~ 0.02A,PF=1)
	Reactive energy basic error limit	0.1%RD(Voltage15V~660V,Current0.02A ~ 60A,PF≥0.5) 0.2%RD(Voltage15V~660V,Current0.01A ~ 0.02A,PF=1)
Energy pulse input	Input pulse	3 channels active, 3 channels reactive
Other parameters	Power supply	90~265VAC/DC
	Power frequency	50Hz~60Hz
	Power consumption	50VA~1000VA
	Environment condition	20℃~30℃,Humidity: RH≤85%
	Storage environment	−20℃~50℃
	Size	600mm(L)× 440mm(W)× 176mm(H)
	Weight	25kg