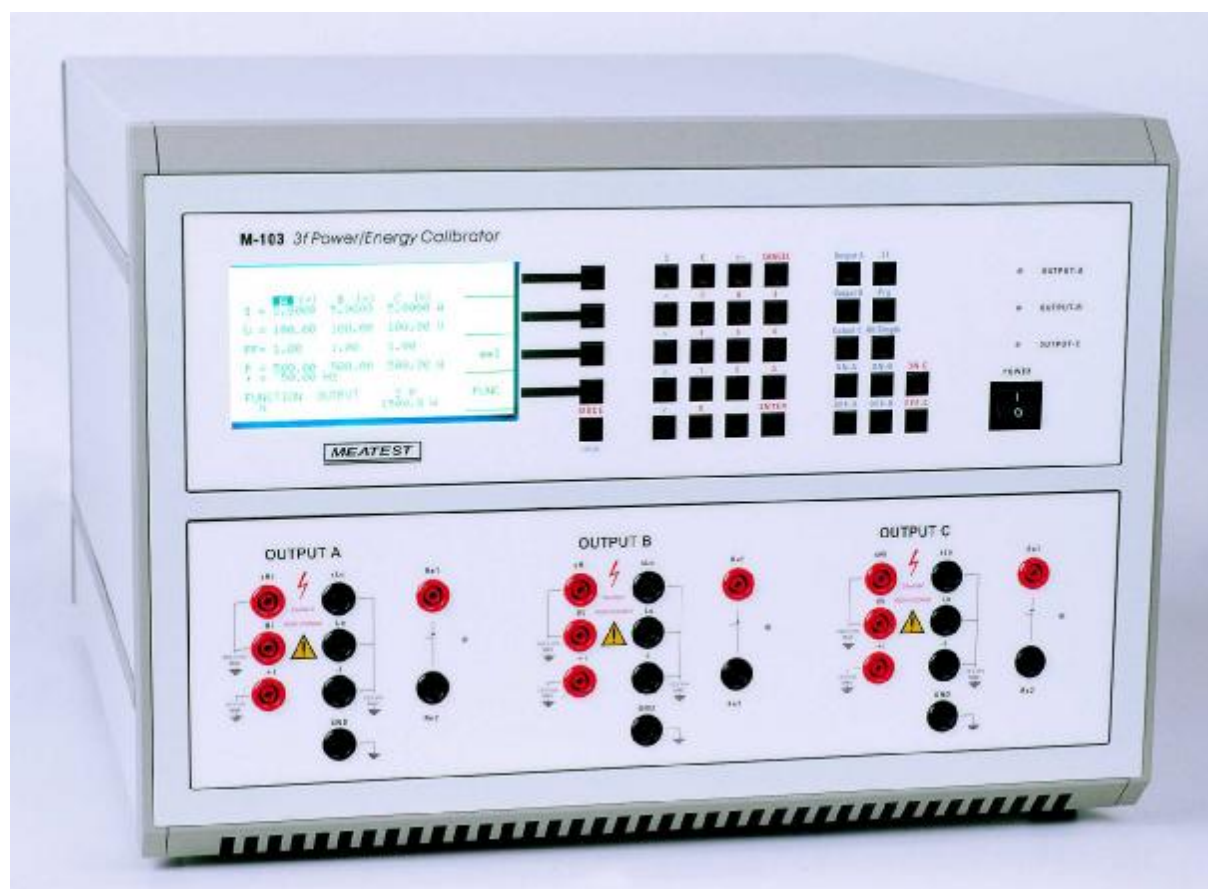


M-103 *Three-Phase Power/Energy Calibrator*



- **Three-phase calibration of voltage, current, power, energy, PF**
- **Basic accuracy 0.07 % in power mode**
- **Power in VA, W, Var, energy in kVAs, kWs, kVArS**
- **Internal 0,015 % 20mA/10V meter for calibrating power convertors**
- **Interface bus GPIB**

MEATEST

MEATEST, spol. s r.o., Ksirova 118a, 619 00 Brno, CZ

Tel. : +420-5-43250886, 7

Fax : +420-5-43250890

www.meatest.cz

meatest@meatest.cz

Three-phase power/energy calibrator M-103 is generator of accurate AC three-phase voltage and current with calibrated phase shift. Output voltage is possible to set in two ranges up to 240 V and output current in three ranges up to 10 A. Power in each phase can be set independently. Frequency covers range from 40 Hz to 400 Hz with resolution 0.01Hz. Calibrator has very good long life amplitude stability and low distortion which enable calibration of power meters with average, RMS or peak value indication.

Calibrator is equipped with 5 1/2 digital DC meter with DC ranges 20 mA or 10 V for direct calibrating of various types of power converters.

Calibrator is suitable for calibration of digital and analogue power meters, energy meters, PF meters, power converters and others.

TECHNICAL DATA

Voltage

Summary output:	6 V to 240 V
Ranges:	80, 200 V
Maximum burden:	30 mA
Total harmonic distortion:	< 0.1 %
Basic uncertainty:	0.05 %
Setting resolution:	5 1/2 digit

Current

Summary output:	100 mA to 10 A
Ranges:	1, 5, 10 A
Compliance voltage:	2,5 V max.
Total harmonic distortion:	< 0.15 %
Setting resolution:	5 1/2 digit
Basic uncertainty:	0.05 %

Power/Energy

Summary range of power:	0.6 VA to 2400 VA in each phase
Typical uncertainty of power:	0.07 – 0.1 % depends on voltage, current, PF setting
Range of time in energy mode:	10 s to 1999 s
Range of power-factor in every phase:	- 1 to +1 (0 to 360 °)
Total uncertainty of phase-shift:	0.1 °

Frequency range:	40 Hz to 400 Hz
Uncertainty of frequency:	0.01 %
Setting resolution:	0.01 Hz

Outputs:	Isolation terminals of current outputs Common Lo terminal of voltage outputs
----------	---

Build in voltage/current meter

Range of current:	0 to 25 mA DC
Range of voltage:	0 to 13 V DC
Basic uncertainty:	0.015 % of range

Control:	manually or via GPIB bus
Calibration:	from the front panel keyboard
Indication:	large area LCD display
Power line:	220/230V / 47 - 63 Hz