

KPM - THREE PHASE ENERGY METER REFERENCE (MT 3000D)



LCD screen 6.4 inch display with resolution 640*480, the testing data and vector chart can be displayed in the same interface.



MT 3000D is a portable Energy Meter Test Reference with 0.02% & 0.05% Accuracy

KPM MT3000D is designed specially for energy meter testing professionals to test **Three phase energy meter at site.**

KPM MT 3000D is a portable standard meter specially used for energy meter on-site test, AC sampling etc. It integrates the functions of electrical parameter measurement, energy meter calibration, connection mode identification, harmonic analysis, waveform display, phasor diagram display, data management.

Functions

- Accuracy: Class 0.02 or 0.05.
- 3PH voltage measurement: 0~480 V.
- 3PH current measurement (direct) : 50 mA~ 12 A.

- 3PH current measurement (clamp) : 100 mA~ 120 A.
- Support energy pulse optical/electrical pulse input.
- LCD touch screen.
- Support AC 100 V~264 V wide range supply.
- Support large capacity lithium battery.
- Internal memory, and quickly record test data.
- USB and RS232 interfaces.
- Color LCD screen, supporting touch operation.
- Front Panel Wiring: convenient for the user to replace the test lead.
- 220 V mains power supply or the lithium battery mode available.
- Internal memory and quickly record the test data, data can be transferred to the PC.



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Three-phase Voltage/Current Measurement

Type	Measurement Mode	Range	Resolution	Accuracy	
				$\pm(\text{ppm of reading} + \text{ppm of range})^{[1]}$	
				Class 0.05	Class 0.02
ACV	Direct Measurement	110 V	1 mV	300 + 200	120 + 80
		220 V	1 mV	300 + 200	120 + 80
		440 V	1 mV	300 + 200	120 + 80
ACI	Direct Measurement	1 A	10 μ A	300 + 200	120 + 80
		10 A	100 μ A	300 + 200	120 + 80
	Clamp Measurement	1 A ^[2]	10 μ A	0.2%*RG	0.1%*RG
		5 A	10 μ A	0.2%*RG	0.1%*RG
		10 A ^[2]	100 μ A	0.2%*RG	0.1%*RG
		20 A ^[2]	100 μ A	0.2%*RG	0.1%*RG
		100 A ^[2]	1 mA	< 50 A: 0.2%*RG; ≥ 50 A: 0.5%*RG	< 50 A: 0.1%*RG; ≥ 50 A: 0.2%*RG

Note [1]: (ppm = parts per million) (e.g., 10ppm = 0.001%).

Note [2]: The clamp of 5A model is standard, and other models is option.

- Voltage input: 10 V~480 V, 6-digits decimal display.
- Current input (direct measurement): 0.05 A~12 A, 6-digits display.
- Current input (clamp measurement): 0.1 A~6 A, 6-digits display.

Frequency/Phase

Frequency	Range	45.000 Hz~65.000 Hz
	Resolution	0.001 Hz
	Accuracy	± 0.01 Hz
Phase	Range	0.000°~359.999°
	Resolution	0.001°
	Accuracy	Direct Measurement: $\pm 0.05^\circ$ Clamp Measurement: $\pm 0.2^\circ$

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Three-phase Power / Energy Measurement

Power/Energy Parameters	Accuracy			
	Direct Measurement		Clamp Measurement	
	Class 0.05	Class 0.02	Class 0.05	Class 0.02
Active P/E $\cos \varphi \geq 0.5$	$\pm 0.05\% \cdot FS^{[3]}$	$\pm 0.02\% \cdot FS^{[3]}$	$\pm 0.2\% \cdot FS^{[3]}$	$\pm 0.1\% \cdot FS^{[3]}$
Reactive P/E $\sin \varphi \geq 0.5$	$\pm 0.1\% \cdot FS^{[3]}$	$\pm 0.05\% \cdot FS^{[3]}$	$\pm 0.5\% \cdot FS^{[3]}$	$\pm 0.2\% \cdot FS^{[3]}$
Apparent power	$\pm 0.1\% \cdot FS^{[3]}$	$\pm 0.05\% \cdot FS^{[3]}$	$\pm 0.5\% \cdot FS^{[3]}$	$\pm 0.2\% \cdot FS^{[3]}$
Power factor	± 0.0005	± 0.0005	± 0.002	± 0.002

Note [3]: FS=voltage range value × current range value.

- Power factor measurement range: -1.000 0... 0.000 0... 1.000 0.
- Standard energy pulse output: high frequency full range value corresponds to 60 kHz, low frequency full range value corresponds to 6 Hz.
- Standard energy pulse input: frequency \leq 200 kHz, voltage: 0... 3.3 V... 24 V.

General Specifications

Power Supply	AC (220 \pm 22) V, (50 \pm 2) Hz
Temperature	Working temperature: 0°C~45°C
Performance	Storage temperature: -20°C~70°C
Humidity	Working humidity: < 80% @ 30°C, < 70% @ 40°C, < 40% @ 50°C
Performance	Storage humidity: (20%~80%) R·H, non-condensing
Interface	USB, LAN

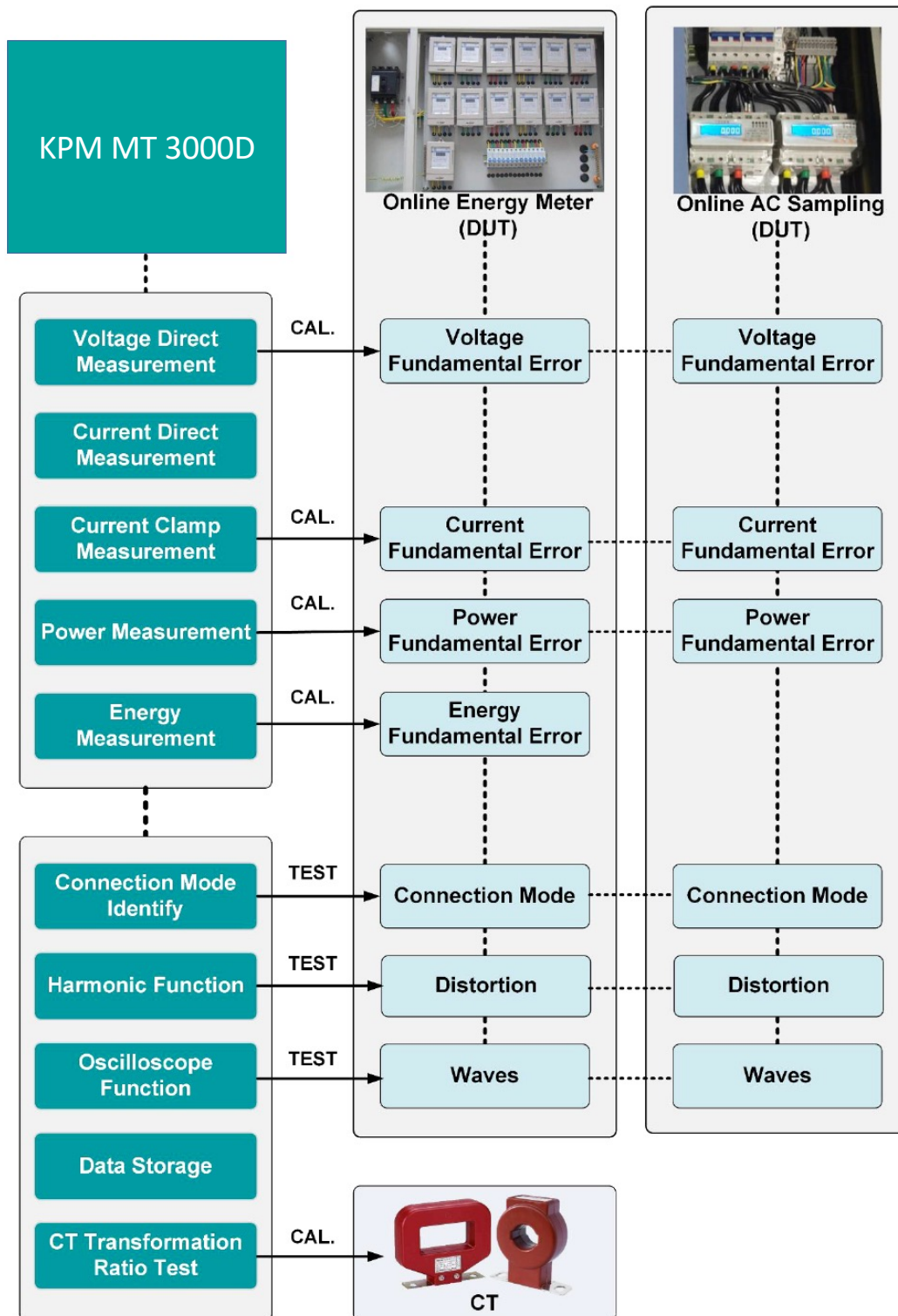
Ordering Information

Class	
Code	Note
500	Class 0.05
200	Class 0.02



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Applications

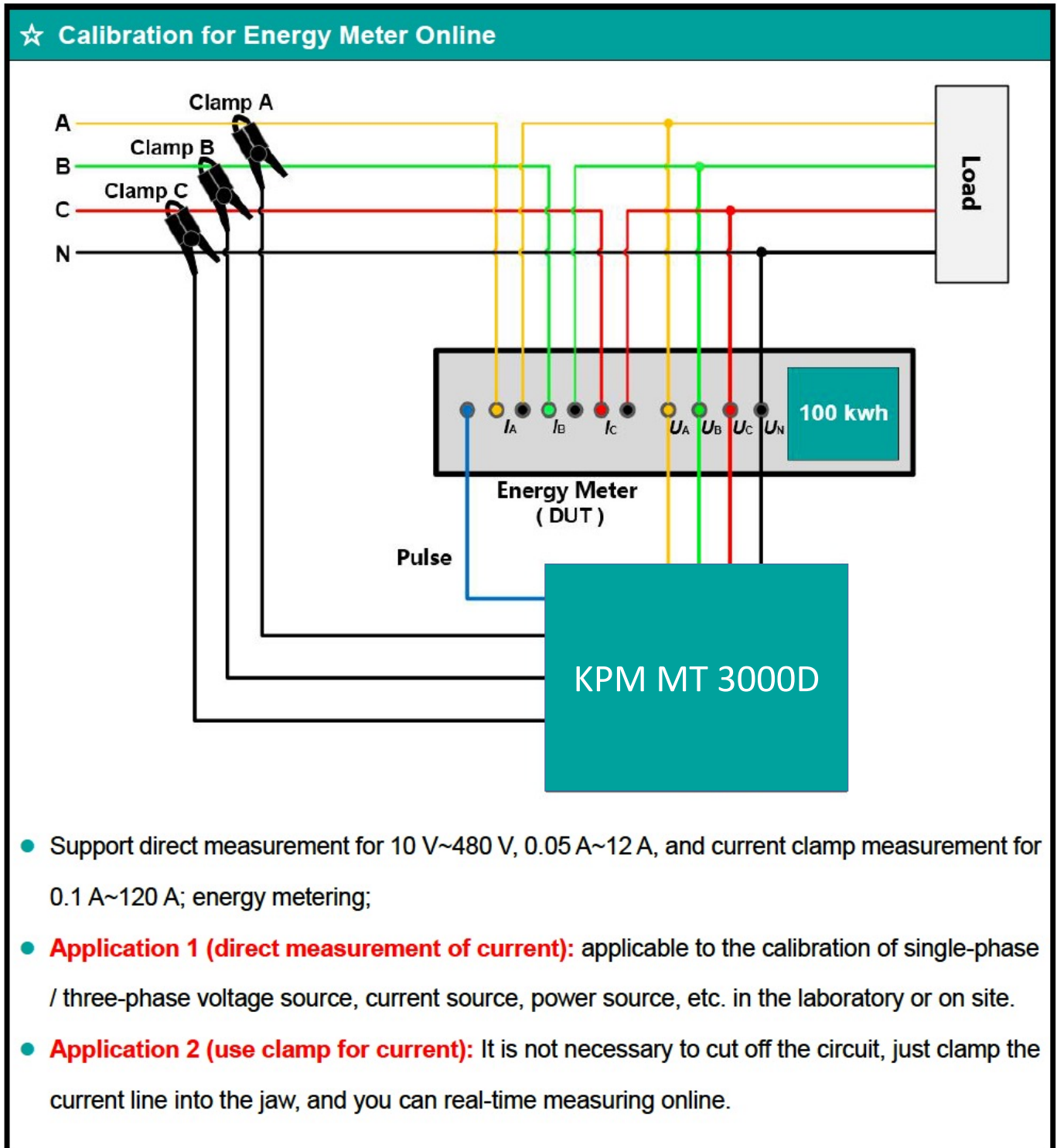


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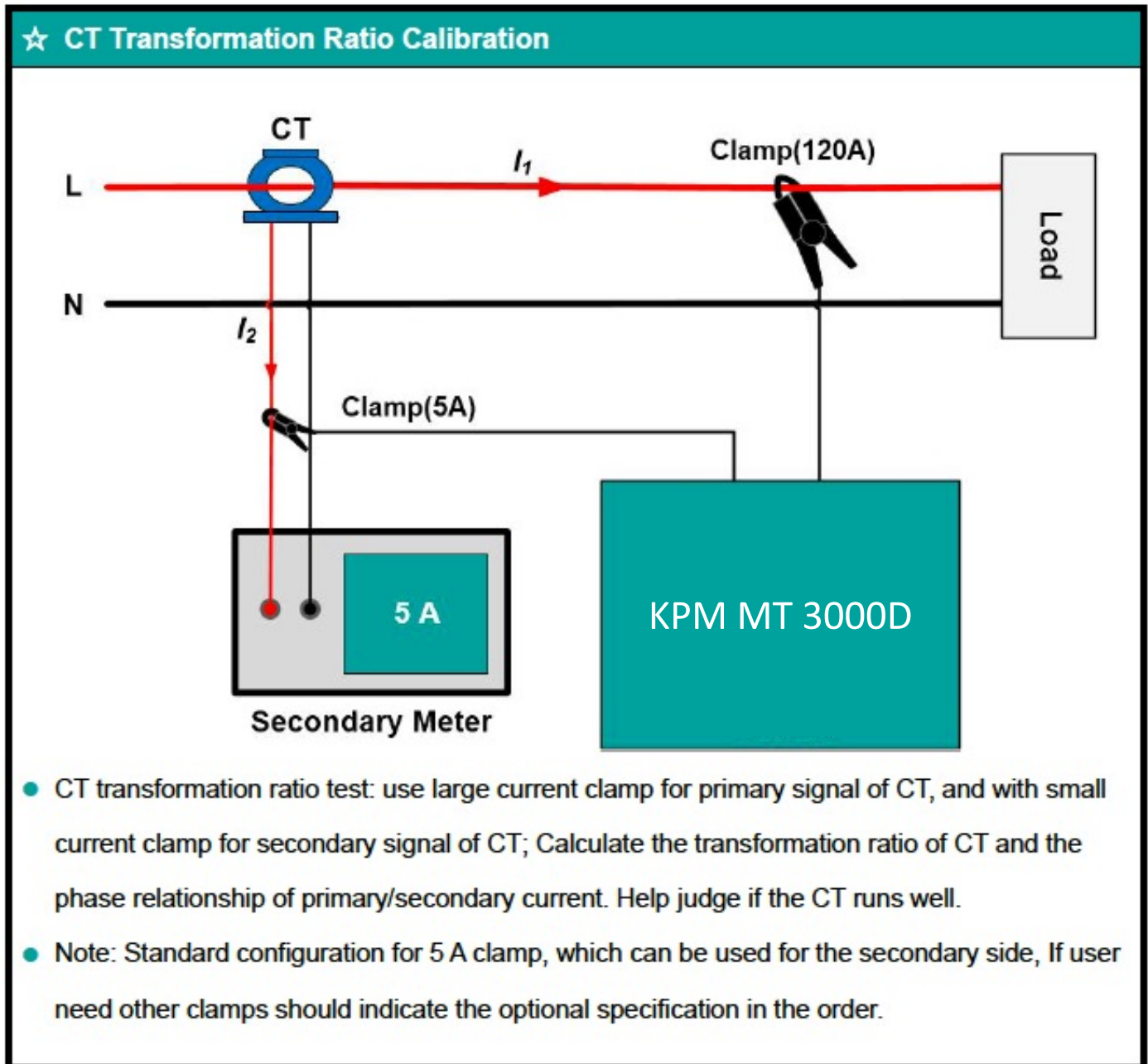
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Connection Diagram



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