

TM7900 Precision Volt-second Generator



1. Summary

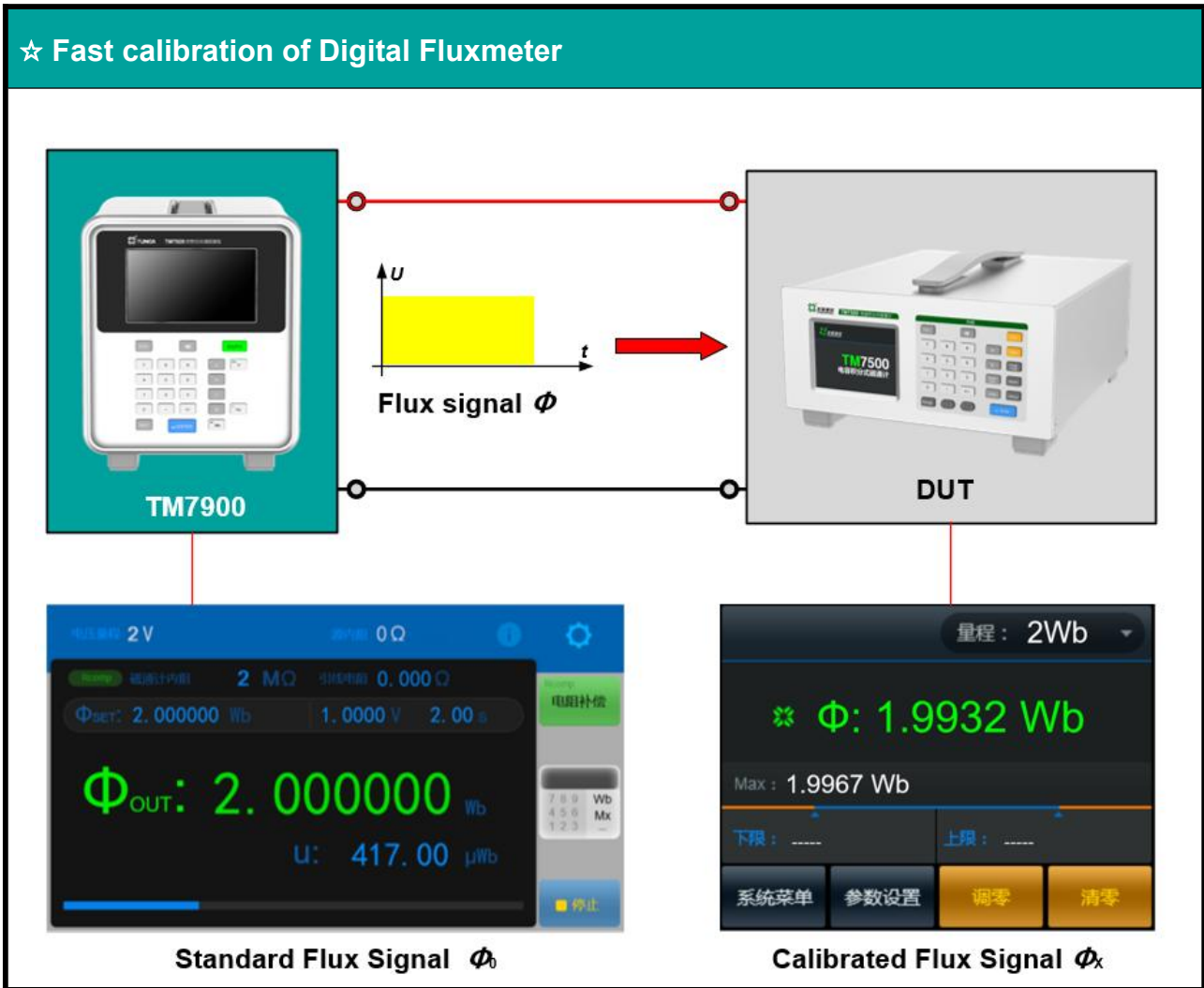
TM7900 is a high-precision Calibration Apparatus for Flux-meter, which generates magnetic flux by a built-in high-precision Volt-second Generator ($1Vs=1Wb$). It calibrates flux-meters by comparing indicating value of the flux-meter with the value it generates. Compared with Mutual Inductance method, Volt-second method is featured with easier to use, better precision and traceability, it is applied for calibrate digital flux-meters and electrical integrators.

2. Features

- Accuracy Class: 0.005, 0.01, 0.02 or 0.05.
- Built-in high-precision voltage source and timer.
- Generate magnetic flux by integrating voltage and time.
- Calculate and output voltage and time by setting magnetic flux value.
- Quick calibration in several seconds.
- Unit switch: mWb, Wb, Vs, mVs, Mx.
- Support setting interior resistance and wire resistance.
- Eliminate interior resistance's influence by compensation.
- Large LCD screen and press-key.

3. Application

☆ Fast calibration of Digital Fluxmeter



4. Specifications

4.1 DCV Output

Range	Accuracy			
	±(ppm of reading + ppm of range) ^[1]			
	Class 0.05	Class 0.02	Class 0.01	Class 0.005
2 mV	200 + 200	100 + 100	50 + 100	20 + 100
20 mV	200 + 200	100 + 50	50 + 30	20 + 10
200 mV	200 + 200	100 + 50	50 + 30	20 + 10
2V	200 + 200	100 + 50	50 + 30	20 + 10

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

- Regulating fineness: 0.005*Range, 0.001%*Range (class 0.005).
- Protective function: Short-circuit protection, Overload protection.

4.2 Adjustable Timer

Pulse output	Accuracy (±)			
	Class 0.05	Class 0.05	Class 0.05	Class 0.05
0.1 s	0.5	0.5	0.2	0.2
0.5 s	0.5	0.5	0.2	0.2
1 s	0.5	0.5	0.2	0.2
5 s	0.5	0.5	0.2	0.2

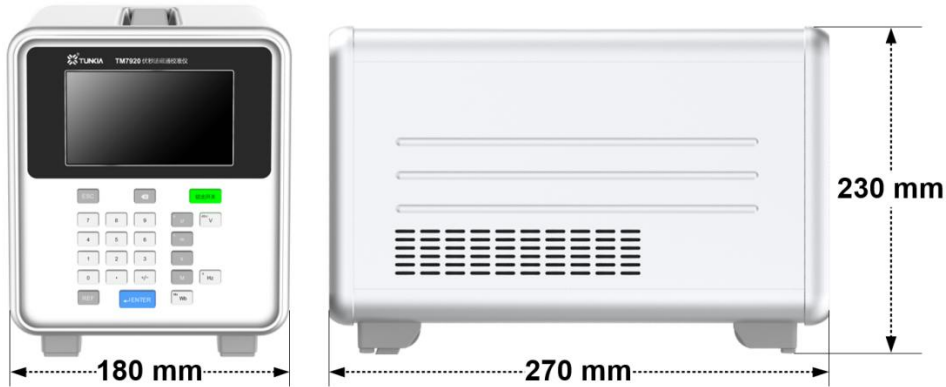
- Pulse width output range: 0.1s ~ 5s

4.3 Standard Flux Output


Range	Accuracy			
	±(ppm of reading + ppm of range)			
	Class 0.05	Class 0.05	Class 0.05	Class 0.05
Combination of voltage and time	500 +0.1	200 +0.1	100 +0.1	50 +0.1

- Flux output range: 0.1mWb ~10Wb, 7-dights display.

5. General Specifications

Power supply	AC (220±22) V, (50±2) Hz
Temperature performance	Operating temperature: 0~50°C; Storage temperature: -20°C~70°C
Humidity performance	Operating humidity: 40%~80% R-H, no condensation Storage humidity : < 95% R-H, no condensation
Weight	About 4 kg
Communication interface	RS232 interface
Dimensions	180mm(width) × 270mm (depth) × 230mm (height)
	

6. Ordering Information

TM7900 – 	Accuracy	
	Code	Note
	500	Class 0.05
	200	Class 0.02
	100	Class 0.01
	50	Class 0.005
<p>e.g.: TM7900-200 represents Class 0.02.</p>		