TM7600 Digital Integration Flux Meter

1. Summary

TM7600 is a series of high precision magnetic flux measuring instruments, using advanced digital sampling and integration methods. It overcomes the defects of traditional capacitance-integrated (RC-integrated) flux meters, such as the long-term drift of capacitance, piezoelectric effect, leakage current and bias voltage/current of amplifier, which lead to the difficulty of improving the measurement accuracy and the obvious integral drift after clearing. It provides an effective measurement method for the research and development of advanced magnetic materials, the manufacture of high-end industrial products and the traceability of magnetic flux value.

2. Features

- Accuracy Class: 0.02, 0.05, or 0.1.
- The drift is ≤ 0.5 μWb/min at 0.05 class.
- Unit switch: Wb, mWb, Vs, mVs, Mx.
- Alarm of exceeding the upper / lower limit.
- One-key reset and zero drift.
- Class 0.02 support ф (t) and U(t) measurement curve display.
- Saves the voltage zero at the input end of the coil.
- Support coil resistance input to eliminate effects.
- Support various of measuring coils.
- Digital and analog signal (option) output.

- Large LCD touch screen.
- Small size, light weight.

3. Specifications

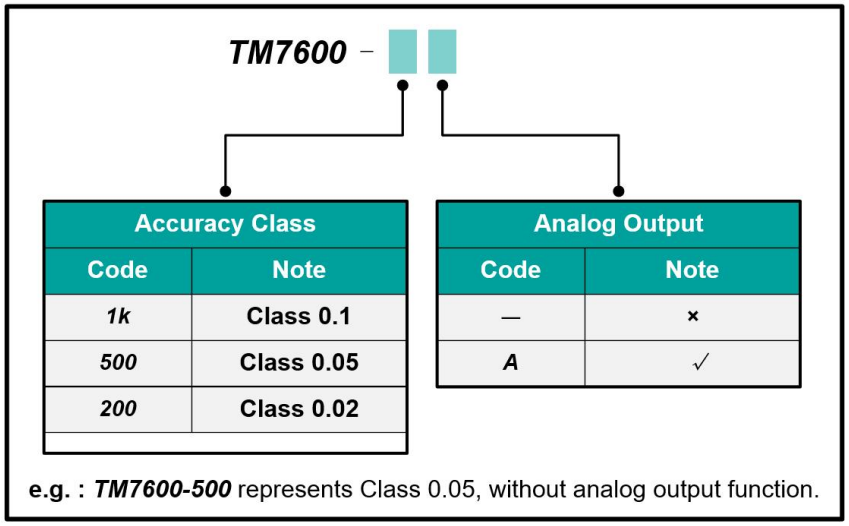
3.1 Voltage Measurement

Range	Resolution	Accuracy ±(ppm of reading + ppm of range) [1]			Temperature coefficient ± ppm*RD /°C @15℃～30℃
		Class 0.1	Class 0.05	Class 0.02	
50 mV	0.1 μV	0.06 + 0.03	0.02 + 0.02	0.012 + 0.006	10
500 mV	1 μV	0.06 + 0.03	0.02 + 0.02	0.012 + 0.006	10
5 V	10 μV	0.06 + 0.03	0.02 + 0.02	0.012 + 0.006	10
50 V	100 μV	0.06 + 0.03	0.02 + 0.02	0.012 + 0.006	10
Note [1] : (ppm = parts per million) (e.g., 10ppm = 0.001%).					

3.2 Magnetic Flux Measurement

Accuracy	Class 0.1	Class 0.05	Class 0.02
Method	Voltage measurements are digitally integrated against time		
Range	Scope of the theory：0.0 Wb～999999 Wb。		
Minimum resolution	10 nWb	10 nWb	10 nWb
Integration time Accuracy	±0.005%	±0.005%	±0.002%
Magnetic flux Accuracy	±(0.1%*RD + 10 μWb)	±(0.05%*RD + 5 μWb)	±(0.02%*RD + 2 μWb)
Zero drift typical value	1 μWb/min	0.5 μWb/min	0.5 μWb/min
Digits display	6-digits	6-digits	6-digits

4. Ordering Information



Accuracy Class	
Code	Note
1k	Class 0.1
500	Class 0.05
200	Class 0.02

Analog Output	
Code	Note
—	×
A	✓

e.g. : ***TM7600-500*** represents Class 0.05, without analog output function.

5. General Specification

Power Supply	AC (220±22) V，(50±2) Hz
Temperature Performance	Operating Temperature: (23 ± 5)℃; Storage Temperature: -20°C～70°C
Humidity Performance	Operating Humidity: 40%～80% R·H, no condensation Storage Humidity : < 80% R·H, no condensation
Weight	About 4 kg
Interface	Flux Coil Input, Rs232, Control, Analog Output Interface
Dimensions	300 mm(L) x 230 mm(W) x 152 mm(H)