

# MEASURING INSTRUMENTS

## Model TM TESLA METER

### Significant improvement of performance while keeping usability of TM-701! New industry standard of handy type

3T (30 kG)  
supported



AC adapter connection port



USB cable connection port

TM-801EXP

#### Features of TM-801EXP (compared with TM-701)

#### Wider measuring range

- High resolution mode accuracy in measurement of DC magnetic flux density improved.
- Frequency covering range in measurement of AC magnetic flux density expanded. (40 - 500 Hz)

#### Max. 160 hours of continuous operation and high-speed sampling

- Sampling speed in HOLD mode increased by 1.5 times.
- Continuous operation time by use of a battery improved by 20% (130 hours → 160 hours).
- 3-way power supply usable: battery, AC adapter and USB feed.

#### PC operation simpler and more useful

- Digital output of measured data to PC by use of USB.
- Measurement commands controllable from PC by use of USB.
- PC free sample software renewed completely.

The Tesla Meter is a practical, handy type Gauss meter having digital display that has been developed based on KANETEC's long experience and achievements in the manufacture of magnetism-applied products. To satisfy the user's needs, this meter has been designed for easy use by anyone by incorporating frequently used functions only.

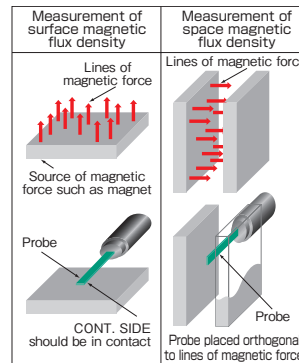
#### [Application]

- Measurement of residual magnetism in machined workpieces.
- Measurement of magnetic flux density in magnetism-applied products.
- Measurement of magnetic flux density of motors.
- Measurement of properties of magnetic materials.

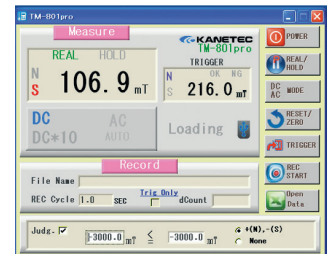
#### [Features]

- A wide measuring range from 0 to 3000 mT. (DC)
- In addition to DC magnetic flux density, AC magnetic flux density can be measured.
- The high resolution measuring mode ensures highly accurate measurement. (Resolution 0.01 mT = 0.1 G)
- The use of sheet keys ensures high dustproof performance.
- The auto power off function prevents useless consumption of the battery.
- When the probe has been worn out, it can be replaced with a new one without troublesome calibration. (Optional)

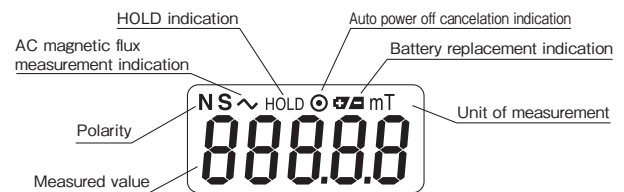
A calibration certificate (manufacturer calibration or JCSS calibration) is issued upon request. (Charged)



Simplified measuring method



PC free software renewed completely



Simple and easy-to-read display

## Specifications

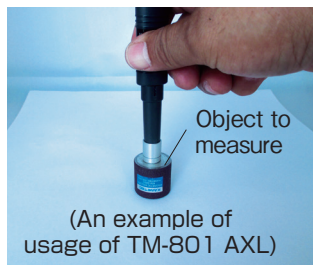
(1mT = 10G)

Model	TM-801EXP				Function	Zero reset	Polarity judgment
Object to detect	DC magnetic flux density		AC magnetic flux density		Output	Max. detect value hold	Auto power off (Cancellable)
	Polarities (N, S)		40 - 500 Hz				
Unit of measurement	mT/G selection				Indication	Detected value	Digital
Measurement range	0-3000.0mT						
Measurement mode	Measurement mode	Measuring range	Resolution	Indication accuracy*1	Power source	- Battery: Size AA (1.5 V) × 4 pieces - External power source 5 - 6 VDC (AC adapter/USB feed)	
	Measuring range	DC × 1*	0- 200.0 mT	0.1 mT			
Resolution	DC × 10	0- 300.00mT	0.01mT	± (5% of rdg. + 10digit)	Mass	Approx. 250 g/0.55 lb (batteries & probe included)	
Indication accuracy	AC*	0- 150.00mT	0.01mT	± (5% of rdg. + 20digit)			
		150.1- 300.0 mT	0.1 mT		Optional	Axial probe (TM-801 AXL) Reference magnetic field (TM-SMF, TM-AMF)	
		301.0-1500.0 mT	1 mT				

\*The measuring range is automatically selected. Note: This meter is not designed for measurement of electromagnetic waves.

※1 The indication accuracy ±(5% of rdg. + 3 digits) is ±(5% of indicated value + 3 × resolution). "digit" = Resolution  
Example: Measurement mode DC × 1, indicated value 123.5 mT (Measuring range 0 - 200 mT, resolution 0.1 mT)  
±(123.5 × 0.05 + 3 × 0.1) = ±6.475 mT ≈ ±6.5 mT Accuracy range is 117.0 - 130.0 mT

**Model TM** PROBE FOR TESLA METER



**[Application]**

A measurement probe for TM-801.

**[Features]**

- Please keep this probe as a spare. It can be replaced without troublesome calibration. In addition to the standard PRB (transverse type), an axial type (AXL) capable of vertical measurement and having high durability is optionally available.

※This can be used with KANETEC conventional models TM-501, TM-601 and TM-701.

		[mm (in)]			
Model	Applicable Meter	Tip Dimensions		Cord Length	Mass
TM-801PRB	TM-801*	(T) 1.0 (0.03) × (W) 3.5 (0.13) × (L) 65 (2.55)		1000 (39.4)	50g / 0.11 lb (including probe cap)
TM-801AXL		φ 13 (0.51) × 55 (2.16)			

**Model TM-SMF / TM-AMF** REFERENCE MAGNETIC FIELD FOR TESLA METER

**For calibration and daily check of Tesla Meter!**

A calibration certificate (manufacturer calibration or JCSS calibration) is issued upon request. (Charged)

**For standard probe**

Applicable probe: KANETEC TM-201 and later models

**[Application]**

- Daily check of the Tesla Meter.
- When a calibration certificate of the reference magnetic field is obtained, the calibration of the Tesla Meter becomes economical.

**[Features]**

- The closed circuit construction employing a permanent magnet that causes less magnetic force leak is employed.
- Small and light weight.

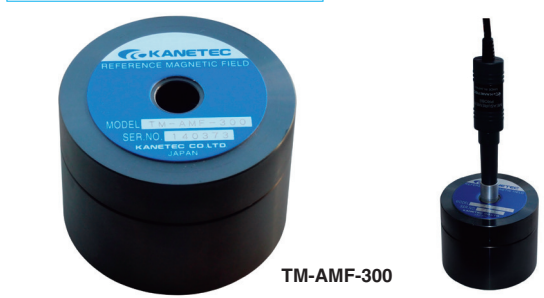


Model	Magnetic Flux Density *	Dimensions		Mass
		Dia.	Height	
TM-SMF- 003	0.003T ( 30G)	φ 43 (1.69)	50 (1.96)	Approx. 0.5kg / 1.10lb
TM-SMF- 050	0.05 T ( 500G)		40 (1.57)	Approx. 0.4kg / 0.88lb
TM-SMF- 300	0.3 T (3000G)		30 (1.18)	Approx. 0.3kg / 0.66lb
TM-SMF-1000	1 T (10000G)		74 (2.91)	Approx. 2.0kg / 4.40lb

※The magnetic flux density is a nominal value. The measurement sheet included with the product shows the actual measured value of the product.

**For axial type probe**

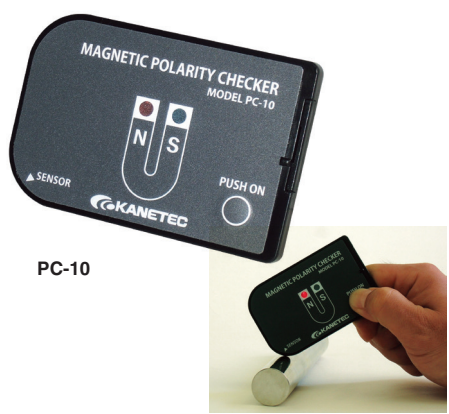
Applicable probe: KANETEC TM-601 AXL, TM-701 AXL, TM-801 AXL



Model	Magnetic Flux Density *	Dimensions		Mass
		Dia.	Height	
TM-AMF- 003	0.003T ( 30G)	φ 70 (2.75)	60 (2.36)	Approx. 1.4kg / 3.08lb
TM-AMF- 050	0.05 T ( 500G)		55 (2.16)	Approx. 1.3kg / 2.86lb
TM-AMF- 300	0.3 T (3000G)		50 (1.96)	Approx. 1.2kg / 2.64lb

※The magnetic flux density is a nominal value. The measurement sheet included with the product shows the actual measured value of the product.

**Model PC** MAGNETIC POLARITY CHECKER



**Simplified checking of residual magnetic flux density and N/S polarity judgment!**

**[Application]**

In addition to screening magnetic material or checking the polarity when a magnet is installed, this can be used as a simplified checker of residual magnetic flux density level of processed products.

**[Features]**

- Card size thickness, 6 mm only, for convenience of carrying.
- The results of polarity judgment are indicated by both light and sound or may be indicated by sound only.  
N Pole (red LED): Sound in short intervals.  
S Pole (blue LED): Sound in long intervals
- Since this checker detects a magnetic flux density of 1 mT (10 G) or over, it can be used for checking a demagnetized state in a simplified manner.

※For precise measurement of the magnetic flux density, please use the Tesla Meter.

[mm (in)]						
Model	Dimensions	Judging Capacity	Indication Lamp	Battery	Mass	Accessory
PC-10	55 (2.16) × 85 (3.34) × 16 (0.23)	N/S approx. 1 mT (10 G) or over	N pole (Red LED) S pole (Blue LED)	CR2025 Button battery (included)	25g / 0.055 lb	Exclusive soft case

MAGNETIC TOOLS & EQUIPMENT  
FOR MEASURING OPERATION  
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MAGNET  
MAGBORE\*  
CHIP & SLUDGE  
CONVEYANCE EQUIPMENT  
ENVIRONMENTAL  
EQUIPMENT  
MAGNETIZER AND  
DEMAGNETIZER  
MAGNETIC EQUIPMENT  
FOR CONVEYANCE  
MAGNETIC  
SEPARATORS  
MEASURING  
TOOLS  
MAGNETIC  
MATERIALS