Version: V1.1.5

#### **DESCRIPTION:**

This series of thickness gauge can nondestructive measure the thickness of non-conductive coatings on metal surfaces and non-ferromagnetic metal coatings on ferromagnetic metals (e.g. iron, nickel, cobalt, etc.), including measuring the thickness of iron, stainless steel surface paint or galvanized layer, measuring the thickness of aluminum,copper surface paint or plastic film.

EC-777 is with a Internal probe, magnetic induction and eddy current effect integrated probe, measuring range is  $0^{\sim}2000\mu m$  and measuring accuracy is  $\pm(2\%+1\mu m)$ , resolution is up to  $0.1\mu m$ .

EC-777 is highly anti-interference and can work in complex electromagnetic field. During measurement, the user needs to quickly attach the end of probe to the surface of the object being measured, during the process of the probe shrinking into the instrument, the instrument can automatically distinguish the properties of the substrate and measure the thickness of the coating (plating) layer. The measurement results can be sent to the APP in real time by Bluetooth. Besides, with big memory card, the gauge record data automatically. And records could be sent to computer by USB.

EC-777 has a strong data processing ability, can display a variety of statistics map and data, and can indicate and alert the over-limit situation. The instrument integrates AI technology and adds the functions of environment self-adaptation and self-protection. The instrument is with a simple standardized menu interface on the large color screen. The realization of many advanced technology and schemes has greatly enhanced the user's sense of human-computer interaction experience.

EC-777E is with external probe version, the gauge can be equipped with a variety of separated probes for easy replacement. EC-777E is better suited to work in narrower spaces or on assembly lines compared with EC-777.



EC-777 Coating Thickness Gauge

#### **FEATURES:**

- Double principle in one, ruby probe
- 2.4 inch color screen
- With Bluetooth and APP function
- · Car or general mode
- High resolution 0.1µm
- High accuracy ±(2%+1μm)
- Measuring range is 0~2000μm (other ranges can be customized)
- Statistic analysis of data
- Standardized menu interface
- Display a curve, bar chart or trend chart
- USB to computer
- Support zero calibration and multi-point calibration
- External probe is optional (EC-777E)
- The maximum speed is 2 times/s
- Self-adaptive back light brightness
- Automatic rotation screen
- Sound volume adjustable
- Red LED alarm, blue and green LED status reminder
- Auto power-off
- · Low power protective

#### **APPLICATION:**

- Car paint thickness detection
- Ship manufacturing
- Electroplating
- Mental anti-rust treatment
- Film thickness detection
- . Metal parts processing

## **NOTE:**

- Sun exposure avoided.
- Corrosive chemicals avoided.
- Prevent the device from falling out.

## **WARNING:**

- Self-disassemble is not allowed!
- No surge with heavy currents/static electricity!

# **SPECIFICATION:**

Model	EC-777	EC-777E
Probe type	Internal probe	External probe
Measuring Principle	Fe: Magnetic induction; NFe: Eddy currents	
Measuring range	0~2000μm	
Accuracy	±(2%+1μm)	
Resolution	0.1μm(0~100μm); 1μm(>100μm)	
Unit	μm, mm, mils, inch	
Calibration	Zero calibration and multi-point calibration	
Statistic	Number of readings, Max, Min, Mean, sample standard deviation, coefficient of	
	variation, number below limit, number above limit	
Chart	Curve, bar chart or trend chart	
Storage	10*13*10 measurement data	
Probe trigger mode	Mechanical trigger, trigger force: 0.4~0.8N	
Minimum curvature radius Convex 5mm		
	Concave 25mm	
Minimum measuring area	Diameter 15mm	
Minimum thickness of substrate	Fe: 0.20mm; NFe: 0.03mm	
Maximum measuring rate	2 readings/s	
Display	2.4 inch color screen	
Bluetooth & APP	Support	
Operation environment	Temperature: -10~+50°C; Humidity: 20~90%RH (Non-condensation)	
Storage environment	Temperature: -20~+60°C; Humidity: 20~90%RH (Non-condensation)	
Power supply	2 pcs 1.5V AA alkaline batteries;	
	2 pcs 1.2V AA rechargeable batteries	
Protection class	IP40	
Size	146*76*32mm	Housing: 146*76*32mm
		Wire: Φ3.5*1000mm
		Probe: Φ17*67mm
Material	ABS	Housing: ABS
		Probe: stainless steel
Weight	About 137g (No battery)	Housing: about 137g (No battery)
		Probe: about 63g
Standards	CE,ROHS,ISO 2178,2360,GB/T 4956-2003,4957-2003,JJG-818-2005	
Warranty	12 months	