

DESCRIPTION:

The EC-555 series thickness gauge is applied to measure the thickness of non-conductive coatings on metal surfaces non-destructively, as well as the thickness of non-ferromagnetic metal coatings on ferromagnetic metals (such as iron, nickel and cobalt). Specific applications are including the measuring of the thickness of iron, stainless steel surface paint or galvanized coating, aluminum, copper surface paint or plastic film, etc.

With the built-in magnetic induction and eddy current effect integrated probe, EC-555 has a measuring range of 0~2000 μ m and a measuring accuracy of $\pm(3\%+1\mu\text{m})$, and its resolution can reach up to 0.1 μ m.

EC-555 has a simple and standard menu interface, which can display a variety of statistical values or statistical graphs, and at the same time can indicate and alarm overruns. During the measurement, the user only needs to quickly fit the probe tip to the surface of the measured object. 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. Readings can be sent to the mobile APP via Bluetooth in real time. In addition, the instrument contains a large-capacity memory. During the measurement process, the instrument automatically counts and records the measurement results. The recorded data can be transferred to the computer at any time through the USB cable.

EC-555S has upgraded the probe based on EC-555, and its accuracy is $\pm(2\%+1\mu\text{m})$. Compared with EC-555, EC-555S has stronger anti-interference ability and can work in more complicated electromagnetic field environment.

EC-555SE is with external probe version, the gauge can be equipped with a variety of separated probes for easy replacement. EC-555SE is better suited to work in narrower spaces or on assembly lines compared with EC-555S.

FEATURES:

- **ruby probe**
- **2 inch colour screen**
- **With Bluetooth and mobile APP function**
- **Car or general mode**
- **Resolution is up to 0.1 μ m**
- **accuracy of $\pm(2\%+1\mu\text{m})$ (EC-555S/SE)**
- **Measurement range is 0~2000 μ m**
- **Statistical analysis of data**
- **Standardized menu interface**
- **Display a curve, bar chart or trend chart**
- **Record data and transfer to PC**
- **Support zero calibration and multi-point calibration**
- **External probe optional (EC-555SE)**
- **Max measurement speed, 2 times/s**
- **Auto rotation**
- **Backlight adjustable**
- **Volume adjustable**
- **Auto shut-down**
- **Low battery protection**

APPLICATION:

- **Measurement for car paint coating**
- **Shipbuilding**
- **Electroplate**
- **Metal anti-rusting**
- **Measurement for plastic foils**
- **Hardware parts process**



EC-555 Series Coating Thickness Gauge

Coating Thickness Gauge

EC-555
EC-555S
EC-555SE

NOTE:

- Best operation environment in 25°C and 40%RH~60%RH.
- Sun exposure avoided.
- Corrosive chemicals avoided.
- Prevent the device from falling out.

WARNING:

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

SPECIFICATION:

Model	EC-555	EC-555S	EC-555SE
Probe Type	Internal probe		External probe
Measuring Principle	Fe: Magnetic induction; NFe: Eddy currents		
Measuring Range	0~2000μm		
Accuracy	±(3%+1μm)	±(2%+1μm)	
Resolution	0.1μm(0~100μm); 1μm(>100μm)		
Unit	μm, mm, mil, inch		
Calibration	Zero calibration; Multi-point calibration		
Statistic	Number of data, maximum, minimum, 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 Force	0.4~0.8N		
Minimum Curvature Radius	Convex 5mm Concave 25mm		
Minimum Measuring Area	Diameter 15mm		
Minimum Thickness of Substrate	Fe: 0.30mm NFe: 0.05mm	Fe: 0.20mm NFe: 0.03mm	
Maximum Measuring Rate	2 readings/s		
Display	2 inch colour screen		
Bluetooth & APP	Support		
Operation Environment	Temperature: -10~+50°C; Humidity: 20~90%RH (Non-condensing)		
Storage Environment	Temperature: -20~+60°C; Humidity: 20~90%RH (Non-condensing)		
Power Supply	3 pcs 1.5V AAA alkaline batteries; 3 pcs 1.2V AAA rechargeable batteries		
Protection Class	IP40		
Size	133*68*30mm		Housing: 133*68*30mm Cable: Φ3.5*1000mm Probe: Φ17*67mm
Material	ABS		Housing: ABS Probe: Stainless steel
Weight	About 90g (No battery)		About 145g (No battery)
Standards	CE,ROHS,ISO 2178,2360,GB/T 4956-2003,4957-2003,JJG-818-2005		