# Coating Thickness Gauge (Functional Type)







#### Model: CM-8829 CM-8829S CM-8829H

## Applications

Coating thickness gauge is a kind of portable measuring instrument, can take fast, intact, precise measurement of coating thickness. It can not only be used in engineering field, laboratories, but also meet the demand of multiple measuring by using different probes. It is used widely in manufacturing, metal processing industry, chemical industry, commodity inspection field, etc. As an essential instrument in material protection industry.

### Principles

| Principles                                     | Applications   | Examples  |
|--|--|---|
| F Type<br>Magnetic<br>Induction<br>(Iron Base) | Measure the<br>thickness of<br>non-magnetic<br>materials on<br>magnetic materials    | Galvanizing layer, lacquer layer,<br>porcelain enamel layer, phosphide<br>layer, copper tile, aluminium tile,<br>some alloy tile, paper etc |
| NF Type<br>Eddy Current<br>(Aluminium<br>Base) | Measure the<br>thickness of<br>non-conductive<br>coatings on non-<br>magnetic metals | Anodizing, varnish, paint,<br>enamel, plastic coatings, powder,<br>etc. Applied to aluminum, brass,<br>non-magnetic stainless steel, etc    |

## Features

- \* Two principles: Magnetic Induction and Eddy Current.
- \* Two measurement mode: Single and Continuous.
- $^{\ast}$  The CM-8829H is a large range meter, range 0~12mm.
- \* Metric/imperial system selectable.
- \* Manual or automatic power off.
- \* Automatic memory of calibration value, and automatic recognize the substrate.
- \* Operation process have buzzing reminder.
- \* Integral Type have better stability and repeatability.
- \* Separate Type can provide several types of probes, measure can be more flexibility.
- \* Use RS-232 data output to connect with PC.
- \* Provide Bluetooth data output choice.

Specifications

| Integral   | CM-8829FN   | CM-8829N   | CM-8829F  |  |  |  |
|--|---|--|---|--|--|--|
| Separate   | CM-8829FNS  | CM-8829NS  | CM-8829FS   | СМ-8829Н   |  |  |
| F Magnetic Induction   | $\checkmark$  |  | $\checkmark$  | $\checkmark$   |  |  |
| IF Type Eddy Current   | $\checkmark$  | $\checkmark$   |   | $\checkmark$   |  |  |
| Range  |   | 0~1250μm / 0~50mil   |   |  |  |  |
| Resolution   |   | 0.1µm / 1µm  |   |  |  |  |
| Accuracy   |   | $\pm 1 \sim 3\%$ n or $\pm 2.5 \mu$ m  |   |  |  |  |
| Min. Radius Workpiece  |   | F Type: convex 1.5 mm / concave 25 mm<br>NF Type: convex 3 mm / concave 50 mm  |   |  |  |  |
| Min. Measuring Area  |   | 6 mm   |   |  |  |  |
| Min. Sample Thickness  |   | 0.3 mm   |   |  |  |  |
| Metric / Imperial  |   | Convertible  |   |  |  |  |
| Battery Indicator  |   | Low Battery Indicator  |   |  |  |  |
| Automatic Power Off  |   | $\checkmark$   |   |  |  |  |
| Temperature  | 0~50°C  |  |   |  |  |  |
| Humidity   | < 80%RH   |  |   |  |  |  |
| Power Supply   |   | 4x1.5V AAA (UM-4) Battery  |   |  |  |  |
| Dimensions   |   | 126x65x27mm  |   |  |  |  |
| Weight (Not Including Batteries)   |   | 115g   |   |  |  |  |
| I<br>g<br>c<br>ti<br>a<br>λ<br>r<br>i<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c | Separate<br>Magnetic Induction<br>F Type Eddy Current<br>e<br>ion<br>Cy<br>Cy<br>Arokpiece<br>ing Area<br>Chickness<br>perial<br>licator<br>wer Off<br>Temperature<br>Humidity<br>pply<br>ons | Separate CM-8829FNS   Magnetic Induction ✓   F Type Eddy Current ✓   on ✓   cy ✓   /orkpiece F Type:<br>NF Type   /orkpiece | Separate CM-8829FNS CM-8829NS   Magnetic Induction √ —   F Type Eddy Current √ √   a 0~1250µm / 0~50mil a   ion 0.1µm / 1µm cy   cy ±1~3%n or ±2.5µm   /orkpiece F Type: convex 1.5 mm / concave   ing Area 6 mm   Thickness 0.3 mm   aperial Convex   icator Low Batter   ower Off —   Temperature 0~50   Humidity <80 | SeparateCM-8829FNSCM-8829NSCM-8829FSMagnetic Induction $\checkmark$ $\checkmark$ $\checkmark$ F Type Eddy Current $\checkmark$ $\checkmark$ $\checkmark$ $\checkmark$ $\checkmark$ $\checkmark$ $\checkmark$ $\bullet$ $0 \sim 1250 \mu m / 0 \sim 50 mil$ $\bullet$ $\bullet$ $0 \sim 1250 \mu m / 0 \sim 50 mil$ $\bullet$ $\bullet$ $0 \sim 1250 \mu m / 0 \sim 50 mil$ $\bullet$ $\bullet$ $0 \sim 1250 \mu m / 0 \sim 50 mil$ $\bullet$ $\bullet$ $0 \sim 1250 \mu m / 0 \sim 50 mil$ $\bullet$ $\bullet$ $0 \sim 1250 \mu m / 0 \sim 50 mil$ $\bullet$ < |  |  |

| Standard Accessories | Main Unit             | $\checkmark$                         | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|----------------------|-----------------------|--------------------------------------|--------------|--------------|--------------|--|
|                      | Probe (F Type)        | $\checkmark$                         |              | $\checkmark$ |              |  |
|                      | Probe (NF Type)       | $\checkmark$                         | $\checkmark$ |              |              |  |
|                      | Large Range Probe (F) |                                      |              |              | $\checkmark$ |  |
|                      | Calibration Base (F)  | $\checkmark$                         |              | $\checkmark$ | $\checkmark$ |  |
|                      | Calibration Base (NF) | $\checkmark$                         | $\checkmark$ |              |              |  |
|                      | Calibration Foils     | 1 set, 5 pieces                      |              |              |              |  |
|                      | Carrying Case         | B04                                  |              |              |              |  |
|                      | Operation Manual      | $\checkmark$                         |              |              |              |  |
| Optional Accessories |                       | RS-232C Data Cable with Software     |              |              |              |  |
|                      |                       | Bluetooth Data Adapter with Software |              |              |              |  |