# COATING THICKNESS GAUGE

## LM-MCDX-1F

- **Single measurement, scan measurement, duplex measurement**
- **Colour touch screen (320 × 480 pixels)**
- **Data storage**
- **USB and wireless**
- **Magnetic inductive measuring probe**

Numerous specialized digital probes can be connected to the coating thickness gauge. This makes applications on particularly small openings, thick coatings and hard-to-reach or small measuring points possible without any problems. Special functions such as scan measurement for rough surfaces and duplex measurement for galvanized and additionally coated steel extend the performance spectrum.

The newly developed digital probe technology enables extremely stable measurement values thanks to a high sampling rate. The measurement signals are digitized directly in the probe for interference-free and precise recording, which leads to particularly accurate and reproducible results. The magnetic induction method of this coating thickness gauge allows measurements of paint, varnish, plastic, rubber, ceramics, galvanization and galvanic coatings on steel. The eddy current method can be used to measure insulating coatings such as paint, varnish, plastic or anodized coatings on non-ferrous metals.

The device has a graphic LCD touch panel with innovative user guidance and a resolution of 320 × 480 pixels. The menu navigation is in German and English, other language packages are optionally available. A protective silicone frame reliably protects the housing from external influences.

The flexibly structured measured value memory and freely definable calibration configurations of the coating thickness gauge offer a wide range of options for customized data acquisition.

## Specification

| **Layer thickness** | |
|---|---|
| Measurement range up to | 2 ... 100 µm |
| Resolution | 0,1 µm |
| Accuracy | ±1 µm |
| **Layer thickness** | |
| Measurement range up to | 100 ... 1000 µm |
| Resolution | 1 µm |
| Accuracy | ±1% |
| **Sensor** | |
| Designation | DX1-F |
| Measurable materials | Measurement of paint, varnish, plastic and galvanised coatings on steel |
| Min. measuring surface | 2 mm dia |
| Min. radius of curvature convex | 1 mm |
| Min. radius of curvature concave | 6 millimetres |
| Additional description | Spring-loaded measuring probe for small parts and complex surfaces |

| **General technical data** | |
|---|---|
| Measuring functions | Quantity, MAX, MIN, Average value, Standard deviation |
| Units | µm, mils |
| Display type | LCD touchscreen |
| Display resolution | 320x480 pixels |
| Storage medium | Internal memory |
| Storage capacity | 10000 Measurements |
| Interface | USB, SCPI |
| Standard(s) | ISO 2178, ISO 2360, BS 5411, ASTM |
| Operating time | 25 h |
| Operating time additional information | Unlimited with external power source |
| Automatic power-off from...to | 5 ... 30 min. |
| Automatic power-off can be deactivated | Yes |
| Menu language | German, English (GB), English, Italian, French, Spanish |
| Protection class (device) | IP64 |
| Power supply | 3x 1.5V AA battery or 5V via USB |
| (Rechargeable) battery | 3 x 1,5 V AA battery , Alkali-manganese |
| Capacity | 3000 mAh |
| Operating conditions | 0 ... 50 °C , 10 ... 90 % RH |
| Storage conditions | 0 ... 50 °C , 10 ... 90 % RH |
| Dimensions ( L x W x H ) | 150 x 85 x 35 mm |
| Weight | 251 g |