

## COATING THICKNESS GAUGE

- Main unit 1
- Probe (F1.5 or N1.5) 1
- Substrate 1
- Calibration foil 1
- Charger 1
- TIME certificate 1
- Warranty card 1
- Instruction manual 1



- Two principles of operation are adapted: magnetic induction (ferrous) and eddy current (non-ferrous) to take non-destructive measurements.
- Features two working modes: DIRECT and BATCH & two measuring ways: CONTINUE and SINGLE
- Statistics include the mean, maximum, minimum, test numbers and standard deviation.
- Memory of 10000 data
- Adjustment and Correction: the system error can be corrected by basic calibrating method.
- Alarming function: alarming automatically if measuring values out of pre-set limitation
- Battery Indicator: Low battery indicator
- Printing function: Integrated thermal printer, measuring value, statistic value can be printed
- Error warning Function: error warning in display during malfunction
- Manual or automatic shutdown.



|                                |                             |              |                      |                    |                    |                             |                    |
|--------------------------------|-----------------------------|--------------|----------------------|--------------------|--------------------|-----------------------------|--------------------|
| Probe                          | F1.5                        | N1.5         | FN1.5                | F1.5R              | F3.5               | FN3.5                       | F10                |
| Working principle              | Magnetic induction          | Eddy current | Both                 | Magnetic induction | Magnetic induction | Both                        | Magnetic induction |
| Measuring range                | 0-1500 μm                   |              |                      |                    | 0-3500 μm          | F: 0-3500 μm<br>N: 0-3000μm | 0-10000 μm         |
| Minimum resolution             | 0.1μm                       |              |                      |                    | 0.1μm              |                             | 1μm                |
| Tolerance                      | ±(1%H+1)μm                  |              |                      |                    | ±(1%H+3)μm         |                             | ±(1%H+5)μm         |
| Min. curvature radius          | Convex 1.5 mm               |              |                      |                    | Convex 5 mm        |                             | Convex 10mm        |
| Min. area diameter             | Φ7 mm                       |              |                      |                    | Φ10mm              |                             | Φ40mm              |
| Critical thickness of the base | 0.5 mm                      | 0.3mm        | F: 0.5mm<br>N: 0.3mm | 0.5 mm             | 0.5 mm             |                             | 2mm                |
| Temperature                    | 10℃ - 30℃                   |              |                      |                    |                    |                             |                    |
| Humidity                       | ≤75%RH                      |              |                      |                    |                    |                             |                    |
| Working environment            | No strong magnetic field    |              |                      |                    |                    |                             |                    |
| Power                          | Li Battery 1 x 3.7V 2200mAh |              |                      |                    |                    |                             |                    |
| Dimension                      | 203.4 x 92.1 x 52.1 (mm)    |              |                      |                    |                    |                             |                    |
| Weight                         | 400g (main unit)            |              |                      |                    |                    |                             |                    |

## TIME2605 NEW Probe Specifications

|                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|--------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                            |  |  |  |  |  |  |  |
| Model                                      | F1.5                                                                              | N1.5                                                                              | FN1.5                                                                             | F1.5R                                                                             | FN1.5R                                                                              | FN1.5-90°                                                                           | F3.5                                                                                |
| Size (mm)                                  | Φ15x103                                                                           | Φ15x103                                                                           | Φ15x103                                                                           | Φ14.5x25x98.5                                                                     | Φ14.5x25x98.5                                                                       | Φ8x10.5x198.5                                                                       | Φ21x50                                                                              |
| Range(μm)                                  | 0-1500                                                                            | 0-1500                                                                            | F : 0 - 1500<br>N:0-1500                                                          | 0-1500                                                                            | F:0-1500<br>N:0-1500                                                                | F:0-1500<br>N:0-1500                                                                | 0-3500                                                                              |
| Tolerance(μm)                              | ±(1%H+1)                                                                          | ±(1%H+1)                                                                          | ±(1%H+1)                                                                          | ±(1%H+1)                                                                          | ±(1%H+1)                                                                            | ±(1%H+1)                                                                            | ±(1%H+3)                                                                            |
| Resolution(μm)                             | 0.1                                                                               | 0.1                                                                               | 0.1                                                                               | 0.1                                                                               | 0.1                                                                                 | 0.1                                                                                 | 0.1                                                                                 |
| Minimum curvature radius for substrate(mm) | Convex1.5                                                                         | Convex1.5                                                                         | Convex1.5                                                                         | Convex1.5                                                                         | Convex1.5                                                                           |                                                                                     | Convex5                                                                             |
| Minimum area diameter of substrate(mm)     | Φ7                                                                                | Φ7                                                                                | Φ7                                                                                | Φ7                                                                                | Φ7                                                                                  | Φ7                                                                                  | Φ10                                                                                 |
| Critical Thickness of the base(mm)         | 0.5                                                                               | 0.3                                                                               | F: 0.5<br>N: 0.3                                                                  | 0.5                                                                               | F: 0.5<br>N: 0.3                                                                    | F: 0.5<br>N: 0.3                                                                    | 0.5                                                                                 |

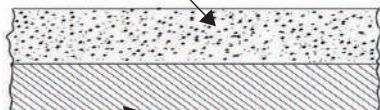
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|--------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                            |  |  |  |  |  |  |
| Model                                      | FN3.5                                                                             | F5                                                                                | F10                                                                               | F0.4-0°                                                                             | F0.4-45°                                                                            | F0.4-90°                                                                            |
| Size (mm)                                  | Φ21x50                                                                            | Φ21x50                                                                            | Φ27x47.5                                                                          | Φ13x(125-160)                                                                       | Φ13x(120-155)                                                                       | Φ13x(120-155)                                                                       |
| Range(μm)                                  | F:0-3500<br>N:0-3000                                                              | 0-5000                                                                            | 0-10000                                                                           | 0-400                                                                               | 0-400                                                                               | 0-400                                                                               |
| Tolerance(μm)                              | ±(1%H+3)                                                                          | ±(1%H+3)                                                                          | ±(1%H+5)                                                                          | ±(1%H+1)                                                                            | ±(1%H+1)                                                                            | ±(1%H+1)                                                                            |
| Resolution(μm)                             | 0.1                                                                               | 1                                                                                 | 1                                                                                 | 0.1                                                                                 | 0.1                                                                                 | 0.1                                                                                 |
| Minimum curvature radius for substrate(mm) | Convex5                                                                           | Convex7                                                                           | Convex10                                                                          | Convex1.5                                                                           | Convex1.5                                                                           | Convex1.5                                                                           |
| Minimum area diameter of substrate(mm)     | Φ10                                                                               | Φ15                                                                               | Φ40                                                                               | Φ3                                                                                  | Φ3                                                                                  | Φ3                                                                                  |
| Critical Thickness of the base(mm)         | F: 0.5<br>N: 0.5                                                                  | 1                                                                                 | 2                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |

## Application of two measuring methods

### Magnetic induction (F)

- Coating: non-magnetic material
- Substrate (base): magnetic material

Any non-magnetic materials such as gold, copper, zinc, tin, lead, resin, rubber, glass and so on.

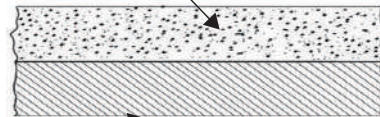


Any magnetic materials such as iron, steel, cobalt and nickel

### Eddy current (N)

- Coating: non-conductors
- Substrate (base): non-magnetic metals

Any non-conductors such as painting, synthetic resin, rubber, glass and so on.



Any non-magnetic metals such as brass, copper, aluminum and so on.