Infrared Ultrathin Thickness Meter
IRMT01

Measure online / continuously the ultra thin film under 10µm!

Infrared Ultra thin Thickness Meter is a contact / online model thickness meter that can continuous / high sensitivity measure the film and coating paint under 10µm.

■ FEATURES

- **Adopt P polarized light and high sensitivity optics**
  By eliminating the surface reflectance, it realizes the high accuracy / high sensitivity measurement.

- **Output updating cycle 28ms, high-speed measurement**
  Real time measurement on the production line.

- **Extend the measuring distance**
  Set the measuring distance as 50mm (our current model 25mm) to reduce the effect of the fluctuating measuring distance.

- **Load self-diagnostic function**
  Output self-diagnostic and easy maintenance.

- **Prepare Setting display unit and Software package**
  RS485 is standard equipped. Communicates with the setting display unit and digital display the measured value, operates various setting, multi-calculation function and alarm. Software Package for the PC is also optionally prepared.

■ Application

- **Film**
  - Measuring the thickness of ultrathin film.
  - Measuring the thickness of solvent coating / resin adhesion

- **Metal**
  - Measuring the thickness of organic film coating/ oiling on the metal plate.
  - Measuring the thickness of corrosion film / insulating film on the steel plate.

■ Models

- **Detector**
  IRMT01

- **Metal**
  Setting Display Unit
  IRGMEG2

  Communication Interface
  R : RS232C (standard)
  A : RS422A
  S : RS485
Configuration

Software package IR-WEF2

Main screen
- Measured data digital display, trend display, alarm display, status display.

Setup screen
- Set the selected variety of upper and lower limit/decimal points/calibration data register/switch/communication setting.

Calibration curve screen
- Creates the calibration curve and check the calibration data.

General Specifications

- Detector
  - Model: IRMT01
  - Measuring system: Infrared ray 3 wavelengths, P polarized light
  - Light source: Tungsten lamp
  - Measuring area: Approx. 12 x 20 mm (at measuring distance 50 mm)
  - Communications: RS485 (MODBUS)
  - Output renewal cycle: 28ms
  - Working temperature: 0 to 40°C
  - Power supply: 24V DC
  - Power consumption: Max. 33VA
  - Casing: Aluminum casting
  - Weight: Approx. 7kg
  - Mounting: Bolt suspension method with 4 pieces of M8 bolts
  - Protection structure: Dust proof, water proof (conform to IP65)

- Setting display
  - Model: IRGMEG2
  - Input signal: RS485
  - Analog output: 4 to 20mA DC, 2output, Load resistance less than 500Ω
  - Communication output: Select one from RS232C, RS422A or RS485
  - Display: Measured data (LED 5-digit), Detector No., CH No., Parameter setup
  - Working temperature: 0 to 50°C
  - Power supply: 100 to 240V AC 50/60HZ
  - Power consumption: Max. 15VA
  - Connection: Power supply, signal-line: terminal connection
  - Weight: Approx. 0.6kg
  - Protection structure: Front part dust proof, water proof (conform to IP65)

External dimensions

- Detector
  - Terminal arrangement
  - Unit: mm
  - Terminal cover
  - Panel cut size
  - Unit: mm

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