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.



Detector

■ 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.



Setting display unit

■ 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

Setting Display Unit

IRGMEG3□

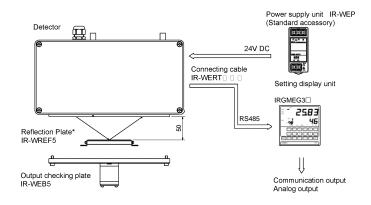
Communication Interface

R: RS232C (standard)

A : RS422A S : RS485



Configuration



*Used when measuring film

■ 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)

RS485 (MODBUS) Communications:

Output renewal cycle: 28ms 0 to 40°C Working temperature: Power supply: 24V DC Power consumption: Max. 33VA

Connection: Power supply, single-line: terminal connection

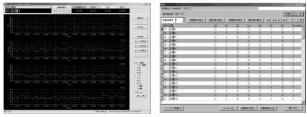
Casing: Aluminum casting Weight: Approx. 7kg

Mounting: Bolt suspension method with 4 pieces of M8

bolts

Protection structure: Dust proof, water proof (conform to IP65)

■ 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.

Setting display

Display:

Model: IRGMEG3□ Input signal: RS485 Output signal: Analog output:

4 to 20mA DC, 2output, Load resistance less

than 500Ω

Communication output:

Select one from RS232C, RS422A or RS485 Measured data (LED 5-digit), Detector No., CH

No., Parameter setup

0 to 50°C Working temperature:

100 to 240V AC 50/60HZ Power supply:

Max. 15VA Power consumption: Connection:

Power supply, signal-line: terminal connection Weight:

Approx. 0.6 kg

IRGMEG3R (RS232C output model) only CE marking:

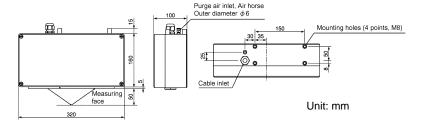
EMC directive --- EN61326-1 Class A Low voltage directive --- EN61010-1,

EN61010-2-030

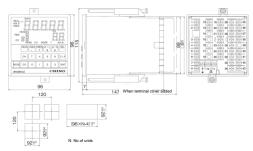
RoHS directive --- EN50581

■ External dimensions

Detector



Setting display unit



Unit: mm

Specifications subject to change without notice. Printed in Japan. 2020. 11

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