

# COATING THICKNESS GAUGE (ADVANCED TYPE) CODE 5402-TC21

TEMPERATURE  
COMPENSATION

ONLINE MEASUREMENT  
IN REAL TIME

BLUETOOTH

- Magnetic induction probe (FM) measures the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate.  
Substrate: steel, iron, alloy, hard magnetic steel, etc.  
Coating: zinc, aluminum, chrome, copper, rubber, paint, etc.
- Eddy current probe (NM) measures the thickness of non-conductive coating on non-magnetic metal substrate.  
Substrate: copper, aluminum, zinc, tin, etc.  
Coating: rubber, paint, plastic, anodized film, etc.
- Real-time temperature compensation guarantees high accuracy, thin plating and oxide layer less than 20 $\mu$ m can be measured accurately
- Reduces the effects of electromagnetic interference and hand-held operation
- Probe can be re-matched after abrasion
- Tolerance measurement with adjustable alarm threshold
- USB and bluetooth interface for data transmission and online measurement in real-time
- Coupling status indication
- Support cable printer



mid-range magnetic  
induction probe  
FL (OPTIONAL)



high-range magnetic  
induction probe  
FX (OPTIONAL)



low-range magnetic  
induction probe  
FS (OPTIONAL)



high-temp magnetic  
induction probe  
FH (OPTIONAL)



eddy current probe  
NM (OPTIONAL)

## SPECIFICATION

Probe	FM (included) magnetic induction probe	FL (optional) mid-range magnetic induction probe	FX (optional) high-range magnetic induction probe	FS (optional) low-range magnetic induction probe	FH (optional) high-temp magnetic induction probe	NM (optional) eddy current probe	
Range	0~1500 $\mu$ m	0~3000 $\mu$ m	0~10000 $\mu$ m	0~500 $\mu$ m	0~3000 $\mu$ m	0~1500 $\mu$ m	
Resolution	0.1 $\mu$ m (<100 $\mu$ m) 1 $\mu$ m (100 $\mu$ m~10000 $\mu$ m)						
Accuracy	zero calibration	$\pm(1\mu\text{m}+2\%L)$	$\pm(1\mu\text{m}+3\%L)$	$\pm(2\mu\text{m}+5\%L)$	$\pm(1\mu\text{m}+2\%L)$	$\pm(1\mu\text{m}+3\%L)$	$\pm(1\mu\text{m}+2\%L)$
	multi-point calibration	$\pm(1\mu\text{m}+1\%L)$	$\pm(1\mu\text{m}+2\%L)$	$\pm(1\mu\text{m}+3\%L)$	$\pm(1\mu\text{m}+1\%L)$	$\pm(1\mu\text{m}+2\%L)$	$\pm(1\mu\text{m}+1\%L)$
Measuring mode	single point measurement, scan mode, differential mode, average mode						
Calibration mode	zero calibration, one-point calibration, two-point calibration, multi-point calibration						
Minimum substrate thickness	0.5mm	0.5mm	2mm	0.2mm	0.5mm	0.3mm	
Minimum measuring area	$\varnothing$ 7mm	$\varnothing$ 7mm	$\varnothing$ 40mm	$\varnothing$ 3mm	$\varnothing$ 7mm	$\varnothing$ 5mm	
Minimum curvature radius of convex workpiece	1.5mm	1.5mm	10mm	1mm	1.5mm	3mm	
Data storage	500 groups						
Interface	USB, bluetooth						
Operation temperature	-10 $^{\circ}$ C~50 $^{\circ}$ C						
Power supply	3 $\times$ 1.5V AAA batteries						
Dimension	150 $\times$ 70 $\times$ 30mm						
Weight	160g						

\* L is the measured value in  $\mu$ m

## STANDARD DELIVERY

<b>Main unit</b>	1 pc
<b>Magnetic induction probe (FM)</b>	1 pc
<b>Zero calibration block for FM probe</b>	1 pc
<b>Calibration foils (12/50/100/250/500/1000<math>\mu</math>m)</b>	6 pcs
<b>AAA battery</b>	3 pcs
<b>Software and USB cable</b>	1 pc

## OPTIONAL ACCESSORY

<b>Eddy current probe (NM)</b>	<b>5401-TC11-NM</b>
<b>Zero calibration block for NM probe</b>	<b>5401-TC11-N</b>
<b>Mid-range magnetic induction probe (FL)</b>	<b>5402-TC21-FL</b>
<b>High-range magnetic induction probe (FX)</b>	<b>5402-TC21-FX</b>
<b>Low-range magnetic induction probe (FS)</b>	<b>5402-TC21-FS</b>
<b>High-temp magnetic induction probe (FH)</b>	<b>5402-TC21-FH</b>
<b>Cable printer</b>	<b>5401-TC11-PRINTER</b>