

## Elcometer 456

## Coating Thickness Gauge

## Product Features

■ Standard

□ Optional

	Model E	Model B	Model S	Model T
Fast, accurate reading rate; <i>70+ readings per minute</i>	■	■	■	■
Repeatable & reproducible measurements	■	■	■	■
Easy to use menu structure; <i>in 30+ languages</i>	■	■	■	■
Tough, impact, waterproof & dust resistant; <i>equivalent to IP64</i>	■	■	■	■
Bright colour screen; <i>with permanent back light</i>	■	■	■	■
Scratch & solvent resistant display; <i>2.4" (6cm) TFT</i>	■	■	■	■
Large positive feedback buttons	■	■	■	■
USB power supply; <i>via PC</i>	■	■	■	■
Test certificate	■	■	■	■
2 year gauge warranty	■	■	■	■
Automatic rotating display; <i>0°, 90°, 180° &amp; 270°</i>		■	■	■
Ambient light sensor; <i>with adjustable auto brightness</i>		■	■	■
Emergency light		■	■	■
Tap awake from sleep		■	■	■
Gauge software updates <sup>1</sup> ; <i>via ElcoMaster™ software</i>		■	■	■
Data output		■	■	■
USB; <i>to computer</i>		■	■	■
Bluetooth®; <i>to computer, Android™ &amp; iOS+ devices</i>			■	■
On screen statistics		■	■	■
Number of readings; $\eta$		■	■	■
Mean (average); $\bar{x}$		■	■	■
Standard deviation; $\sigma$		■	■	■
Highest reading; <i>hi</i>		■	■	■
Lowest reading; <i>lo</i>		■	■	■
Coefficient of variation; <i>COV</i>		■	■	■
Elcometer index value <sup>2</sup> ; <i>EIV</i>		■	■	■
Nominal dry film thickness; <i>NDFT</i>			■	■
IMO PSPC; <i>%&gt;NDFT, %&gt;90&lt;NDFT, 90:10 pass/fail</i>			■	■
High & low limits; <i>definable audible &amp; visual alarms</i>			■	■
Number of readings above high limit;			■	■
Number of readings below low limit;			■	■
Live reading trend graph; <i>in batch mode</i>			■	■
ElcoMaster™ software & USB cable		□	■	■
Replaceable screen protectors	□	□	■	■
Protective case	□	■	■	■
Plastic transit case	□	□	□	■
Integral models; <i>with automatic gauge switch on</i>	■	■	■	■
Probe type; <i>Ferrous (F), Non-Ferrous (N), Dual (FNF)</i> <sup>3</sup>	F, FNF	F, N, FNF	F, N, FNF	F, N, FNF
Measurement range	0-1500µm 0-60mils	0-13mm 0-500mils	0-1500µm 0-60mils	0-1500µm 0-60mils
Separate models; <i>with automatic probe recognition</i>		■	■	■
Probe type; <i>Ferrous (F), Non-Ferrous (N), Dual (FNF)</i> <sup>3</sup>		F, N, FNF	F, N, FNF	F, N, FNF
Measurement range; <i>see page 11 for probe selection</i>		0-31mm 0-1220mils	0-31mm 0-1220mils	0-31mm 0-1220mils

\*The Elcometer 456 is extendable within 60 days from date of purchase, free of charge, to 2 years via [www.elcometer.com](http://www.elcometer.com).

Elcometer 456 probes are covered by a 1 year warranty.

<sup>1</sup> Internet connection required

<sup>2</sup> Elcometer Index Values are used in the automotive industry to assess a coating's overall quality; USA Patent Number US7606671B2

<sup>3</sup> FNF Patent Numbers UK: GB2306009B; USA: 5886522

\* Visit [www.elcometer.com/sdk](http://www.elcometer.com/sdk) to find out how to integrate Elcometer's MFi certified products to your App.

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	Model E	Model B	Model S	Model T
On-screen calibration instructions; <i>in 30+ languages</i>	■	■	■	■
Multiple calibration methods	■	■	■	■
Factory; <i>resets to the factory calibration</i>	■	■	■	■
2-point; <i>for smooth and rough surfaces</i>	■	■	■	■
1-point; <i>zero calibration</i>		■	■	■
Zero offset <sup>4</sup> ; <i>for calibration according to ISO19840</i>			■	■
Predefined calibration & measurement methods			■	■
ISO, SSPC PA2, Swedish, Australian			■	■
Automatic calibration; <i>for rapid calibration</i>			■	■
Calibration memory type; <i>gauge (g) or gauge &amp; batch (gb)</i>	g	g	gb	gb
Number of batches; <i>with unique calibrations</i>			1	2,500
Calibration memories; <i>3 user-programmable memories</i>				■
Measurement outside calibration warning				■
Calibration lock; <i>with optional PIN code unlock</i>		■	■	■
Delete last reading		■	■	■
Gauge memory; <i>number of readings</i>		Last 5	1,500	150,000
Individual batch calibrations; <i>sent to PC via ElcoMaster™</i>			■	■
Limits; <i>user definable audible &amp; visual pass/fail warnings</i>			■	■
Gauge (g) or gauge & batch specific (gb) limits			g	gb
Date and time stamp			■	■
Review, clear & delete batches				■
Batch types; <i>normal, counted average, IMO PSPC</i>			■	■
Navsea Mode				■
Batch review graph				■
Copy batches and calibration settings				■
Alpha-numeric batch names; <i>user definable on the gauge</i>				■
Scan & auto repeat modes; <i>with Ultra/Scan probe connected</i>				■
Fixed batch size mode; <i>with batch linking</i>				■

Technical Specification	
Display information	2.4" (6cm) QVGA colour TFT display, 320 x 240 pixels
Battery type	2 x AA dry cell batteries, rechargeable batteries can also be used
Battery life	approx 24 hours of continuous use at 1 reading per second <sup>5</sup>
Gauge dimensions (h x w x d)	141 x 73 x 37mm (5.55 x 2.87 x 1.46")
Gauge weight (including batteries supplied)	Separate: 161g (5.68oz) Integral: 156g (5.50oz)
Operating temperature	-10 to 50°C (14 to 122°F)
Packing List	Elcometer 456 gauge, calibration foils (integrals only), wrist harness, transit case (T), protective case (B, S, T), 1 x screen protectors (S, T), 2 x AA batteries, operating instructions, USB cable (S, T), ElcoMaster™ software (S, T) For separate gauge probe options see page 11

■ Standard    □ Optional

<sup>4</sup> Zero Offset USA Patent Number US6243661

<sup>5</sup> Using default settings & lithium batteries, alkaline or rechargeable batteries may differ