

# Rz Meter Pocket Surf III

## Roughness Gauge

The Pocket Surf III Surface Meter is a pocket-sized, battery-operated roughness gauge for measuring stencil and substrate surface roughness parameters in  $R_a$ ,  $R_{max}$  and  $R_z$  with digital readout. The Pocket Surf III is solidly built with a durable cast aluminum housing for years of accurate surface measurements. Its digital display is conveniently located on top of the device for optimum visibility.

### Features

- General purpose probe with 0.0004" / 10 micron radius
- Offers three traverse lengths
- Supplied with a certified reference specimen, riser plate battery and custom-fitted protective case
- Easy-to-read LCD display presents the measured roughness values in microinches or micrometers
- Out-of-range (high/low) and battery low warning signals
- Serial output for Statistical Process Control (SPC)
- Optional power transformer to replace battery operation

### Benefits

- Economically priced
- Fast and accurate; measurement produced within a half second of traversing the surface
- Provides a measurable indicator of how efficiently the print side of the stencil controls edge definition
- An acceptable  $R_z$  value assures proper gasketing of the stencil to the substrate, and controls the ink flow



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Technical Specifications	
Overall Dimensions	Approximately 5-1/2" W x 3" H x 1" D
Measuring Ranges	$R_a$ – 1m" to 250m" / 0.03mm to 6.35mm, $R_y$ – 8m" to 999m" / 0.2mm to 25.3mm
Display Resolution	$R_{max}^*$ – 8m" to 999m" / 0.2mm to 25.3mm, $R_z^*$ – 8m" to 999m" / 0.2mm to 25.3mm 1m"/0,01mm
Measurement Accuracy	Meets ANSI-B46.1, ISO, DIN standards and MIL specifications
Digital Readout	LCD, 3 digit, battery low signal, "H" and "L" (out-of-range measured values)
Traverse Speed	.2"/5.08mm per second
Cutoff	.030"/0.8mm ANSI 2RC filter
Probe Type	Piezoelectric
Maximum Stylus Force	1500mfg/15.0mN
Power	9 volt consumer-type alkaline battery
Battery Capacity	Approximately 3,000 measurements, depending on frequency of use and output option
Operating Temperature	50° to 113°F/10° to 45°C
Storage Temperature	-4° to 149°F/-20° to 65°C

Parameters	Traverse Length	Evaluation	Number of Cutoffs / Switch Position
$R_a/R_y$	.075" / 2.0mm	.030" / 0.8mm	1
	.135" / 3.5mm	.090" / 2.4mm	3
$R_a/R_z/R_{max}$	.195" / 5.0mm	.150" / 4.0mm	5