

Technical Specification Roughness Tester HOMMEL ETAMIC W10

**Roughness Tester for mobile measurement in accordance with international standards /
with wireless feed / 90 ° rotatable button / 4.3" large touchscreen /
8 measurement programs / measuring program for device verification**

The roughness tester Hommel Etamic W10 is a portable instrument for measuring roughness. The roughness tester measures all common roughness variables according to international standards such as DIN EN ISO or ISO MOTIF. Furthermore, the surface roughness tester is mains power independent, because it is battery powered. It features a wireless feed, which makes it very flexible for applications in practical operation. The button can be swiveled by 90 °, thereby with the roughness meter overhead measurements can take place in a vertical position or a transverse scan. The roughness tester is operated with a modern 4.3" touch screen, which simultaneously immediately displays a tolerance rating and surface profiles. These measurement results can be printed directly via an integrated thermal printer, making immediate documentation possible. This roughness tester has 8 possible measurement programs, of which a monitoring program is specially designed for equipment verification. Here an integrated roughness standard and setpoints are stored, so that the device can be checked on the spot. Optionally, evaluation software EVOVIS can be purchased for the roughness tester equipped with USB and Bluetooth interface, which makes it possible to evaluate identified measured values and save them to a computer.

- Operation by touchscreen
- Wireless feed
- Thermal printer (integrated tolerance evaluation)
- 8 measurement programs
- Measuring program specifically for equipment testing
- Transverse scan, overhead & vertical measurement
- Integrated roughness standard
- Automatic memory function

Technical Specification of Roughness Tester

Measuring range	-210 ... +110 µm (320 µm)
Button	Inductive skids button T1E: 2 µm / 90 °
Measurement units	µm / µ inch selectable
Max. traversing	17.5 mm
Traversing according to ISO / JIS	1.5 / 4.8 / 15 mm
Traversing according to MOTIF	0.64 / 3.2 / 16 mm
Cut-off	0.08 / 0.25 / 0.8 / 2.5 mm
Number of sampling lengths	1 ... 5 selectable

Filter	DIN EN ISO 11562: Gaussian filter DIN EN ISO 16610-21: Gaussian filter DIN EN ISO 13565-1: Filter for Rk parameters DIN EN ISO 3274: λ_s -Filter
Keying speed vt	0.15 / 0.5 / 1 mm/s; Returns 3 mm/s
Data point spacing	min. 0.5 μm (9600 points at $l_t = 4.8 \text{ mm}$)
Size characteristic DIN EN ISO 4287	Ra, Rz, Rmax, Rt, Rq, RSm, Rp, Rv, Rq, Rsk, Rku, Rdc, Rdq, RzISO, Rmr, Rmr (c), C(Rmr), Pt, Pz, Pa
Size characteristic DIN EN ISO 13565-1, -2	Rk, Rpk, Rvk, Mr1, Mr2, A1, A2, Rpk*, Rvk*
Size characteristic MOTIF ISO 12085	R, AR, Rx, CR, CL, Nr, CF
Size characteristic ASMB46	Rpm
Size characteristic JIS B601 (2001)	Rz-JIS
Size characteristic DIN EN 10049	RPc
Size characteristic Daimler MBN 31007	R3z
Battery (basic unit)	Li-Ion rechargeable battery, 800 measuring cycles (without expression, tracing length 4.8mm)
Measurement programs	7 measurement programs, 1 measurement program for instrument inspection
Data storage	2000 measurement datasets / size characteristics, 500 profile records
Interfaces	USB, Bluetooth
Dimensions	224 x 226 x 70 mm (roughness tester W10) 151 x 50 x 55 mm (feed LV17)
Weight	980 g (roughness tester W10) 275 g (feed LV17)
Integrated printing unit	
Printing process	Static thermal cell
Paper / printing width	57 \pm 0.5 mm / 48 mm
Paper roll	$\varnothing = 31 \text{ mm}$
Resolution	8 points / mm, 384 points / line
Print functions	Measuring conditions, size characteristics, roughnessprofile, Abbott curve, statistics

Delivery Contents of Roughness Tester

1 x W10 Roughness Tester, 1 x feed LV17, 1 x roughness button T1E, 1 x button protection, 1 x support prism for smallshafts (from $\varnothing 10 \text{ mm}$), 1 x USB cable, 1 x AC adapter 90-240 V, 1 x roughness standard, 1 x Allen key, 1 x factory acceptance certificate, 1 x roughness standard datasheet, 1 x operating instructions, 1 x bag