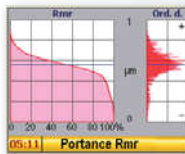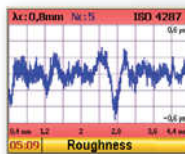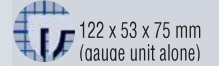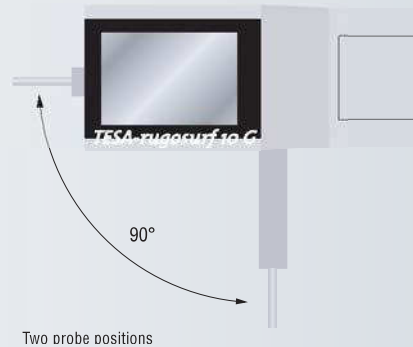# TESA RUGOSURF Roughness Gauge 10G

Portable, versatile gauge unit with compact design, well suited for receiving inspection or for use in the production area or the measurement laboratory.

Measures roughness parameters according to ISO 4287:1997/ JIS B0601:2001, DIN and ISO 12085:1998 (MOTIF or CNOMO).

- TFT graphic display for optimum visual representation of any measured parameters and workpiece profiles, size to 2".
- Direct displaying of all measured values and computed profiles.
- 31 roughness parameters available.
- Wide autonomy through mains adapter or battery pack.
- Output, storage or transfer to a PC of the results obtained from a number of measurements as high as 999.
- Possible tolerancing of all parameter values.
- Multilingual menu options.
- USB data output enabling a direct connection to the printer unit or a conventional PC equipped with RUGOSOFT 10 (both are optional).

USB
ISO 3274 (Cl.1)
10°C to 40°C
-10°C to +50°C
122 x 53 x 75 mm (gauge unit alone)
590 g
Suited plastic case
Declaration of conformity

90°

Two probe positions

06930011   TESA RUGOSURF roughness gauge 10G

Delivered with the following standard accessories:

Roughness standard, nominal value Ra = 2.97 µm / 117 µin
Rechargeable battery 7.2 V, 300 mAh, NiMH in PP3 format
Standard probe, type **SB10**
Battery charger
Adapter for universal stand, 8 mm diameter
Positioning support

Technical Data

	06930010	06930011
N°		
	RUGOSURF 10	**RUGOSURF 10G**
Display	LCD, 2 lines of 16 characters	TFT colour display, 2" in size
Roughness parameters	according to ISO 4287-1997 / JIS B0601 / ASME B46-2002 Ra - Rq (RMS) - Rt - Rz - Rc - Rsm according to ISO 12085 (CNOMO) Pt - R - Rx - AR	according to ISO 4287-1997/JIS B0601:2001 ASME B46-2002 Ra - Rq (RMS) - Rt - Rz - Rp - Rc - Rv - Rsm - Rδc - Pa - Pq - Pt - Pp - Pc - Pv - Psm - Pδc according to PrEN 10049 RPc - PPc according to ISO 13565 Rk - Rpk - Rvk - Mr1 - Mr2 according to DIN 4776 Rmax according to DB N31007 R3z - R3zm according to ISO 12085 (CNOMO) Pt - R - Rx - AR
Measuring span X-axis Z-axis	16 mm (0.63 in) 160 µm (6300 µin)	16 mm (0.63 in) 300 µm (11810 µin)
Unit system	mm / in	mm / in
Range of indication	Ra 0 ÷ 40 µm (0 ÷ 1575 µin) Rt 0.05 ÷ 160 µm (0 ÷ 6300 µin)	Ra 0 ÷ 75 µm (0 ÷ 2952 µin) Rt 0.05 ÷ 300 µm (0 ÷ 11810 µin)
Resolution	0.01 µm (0.1 µin)	0.001 µm (0.01 µin)
Cut-off length	0.25-0.8-2.5 mm (0.01-0.03-0.1 inch)	0.25-0.8-2.5 mm (0.01-0.03-0.1 inch)
Numerical filter	Gaussian as per ISO 11562	Gauss as per ISO 11562
Traversing length l_t	(number of cut-offs + 1) x λc	(number of cut-offs + 1) x λc
Cut-off l_c	number of cut-offs x λc	number of cut-offs x λc
Number of selectable cut-offs	1 to 5	1 to 10 cut-offs of 0.25 and 0.8 mm 1 to 5 cut-offs of 2.5 mm
Probing speed Reverse speed	1 mm/s 2 mm/s	1 mm/s 2 mm/s
Keypad	4-key, membrane type key pad, protected against dust particles and liquids	4-key, membrane type key pad protected against dust particles and liquids
Probe	Inductive probe	Inductive probe
Stylus	90° diamond tip	90° diamond tip
Tip radius	5 µm	5 µm
Measuring force	0.75 mN (ISO 3274)	0.75 mN (ISO 3274)
Languages	English, French, German, Spanish, Italian, Portuguese	English, French, German, Spanish, Italian, Portuguese
Memory capacity	max. 100 measured values	max. 999 measured values
Power supply	Battery pack, 8.4 V – 170 mAh	Battery pack, 7.2V – 300 mAh
Power consumption	max. 3 VA at 220 V	max. 6.5 VA at 220 V
Overall dimensions	122 x 53 x 81 mm (gauge unit alone)	122 x 53 x 75 mm (gauge unit alone)
Weight	590 g	590 g