

# DIGITAL SURFACE ROUGHNESS TESTER

## HANDY SURF

### PRODUCT DESCRIPTION

The LABWAN LSRT-280 Digital Surface Roughness Tester – Handy Surf is a portable surface roughness measurement instrument designed for high repeatability and accuracy. It shows the pressure of the stylus and provides multiple surface roughness parameters and conversion values.



### FEATURES

- Shows the pressure of the stylus
- Shows all the parameters of all conversions
- High repeatability and accuracy

### APPLICATION/USES

- Aerospace
- Automobile
- Atomic Center
- Defence Industries
- Airforce
- Heavy Industries

## Technical Specifications

| Description                  | Details                                                                                       |
|------------------------------|-----------------------------------------------------------------------------------------------|
| Product Name                 | Digital Surface Roughness Tester Handy Surf                                                   |
| Model Number                 | LSRT-280                                                                                      |
| Detection Principle          | Inductive                                                                                     |
| Maximum Drive Travel         | ≤ 17.5 mm                                                                                     |
| Measuring Range              | 320 μm                                                                                        |
| Measuring Range (Parameters) | Ra, Rq: 0.005μm ~ 32μm; Rz, Ry, Rt, Rp, Rm: 0.02μm ~ 320μm; Rsm, Rs: 1mm; Rmr: 0~100%         |
| Needle Tip Radius            | 5 μm                                                                                          |
| Accuracy                     | 0.001 μm                                                                                      |
| Needle Tip Material          | Diamond                                                                                       |
| Value Error                  | ≤ ±8%                                                                                         |
| Measured Force               | ≤ 4 mN                                                                                        |
| Value Variability            | ≤ 5%                                                                                          |
| Needle Stylus Angle          | 90°                                                                                           |
| Power Supply                 | Built-in lithium-ion rechargeable battery / external power adapter                            |
| Leader Longitudinal Radius   | 45 mm                                                                                         |
| Data Output                  | Bluetooth / USB                                                                               |
| Parameter Measurement        | Ra, Rq, Rz, Rt, Rp, Rv, RS, RSm, Rsk, Rku, RPc, Ry, Rmax, R3z                                 |
| Sample Length                | 0.25 mm, 0.80 mm, 2.50 mm                                                                     |
| Evaluation Length            | 1L ~ 5L optional (L is the sample length)                                                     |
| Overall Size                 | 156 mm × 55 mm × 46.5 mm                                                                      |
| Instrument Weight            | ≤ 398 g                                                                                       |
| Work Environment             | Temperature: -20°C ~ 40°C; Relative humidity: < 90%, no vibration, no corrosive medium around |