

# Mitutoyo

## Surfrest SJ-310 [mm]

"R2 $\mu$ m; 0,75mN"

Item number: 178-570-11D



### Description

This is a portable measuring instrument that allows you to easily and accurately measure surface roughness.

#### The Surfrest SJ-310 offers you the following benefits:

- Skid system with touch-screen functionality and built-in printer.
- It works independently of mains power, allowing you to make on-site measurements.
- Easy and intuitive menu navigation.
- The large **14.5 cm** [5.7"] colour LCD gives you high visibility.
- It performs roughness analyses conform to various international standards (EN ISO, VDA, ANSI, JIS) and customized settings.
- You can store up to 10 different measuring conditions inside the SJ-310, and up to 500 with an optional SD card.
- Statistical analysis and coloured tolerance judgement.
- 2 different evaluation conditions within 1 measurement adjustable.
- You can separately password protect many functions.
- It comes with support for 16 languages.

### Features

Detector measuring force:	<b>0.75 mN</b>
Stylus tip angle:	<b>60°</b>
Stylus tip radius:	<b>2 <math>\mu</math>m</b>
Mass:	<b>1.7 kg</b>
Cable length:	<b>1 m</b>
Measuring method:	<b>Induction method</b>
Stylus:	<b>Diamond Tip</b>
Skid radius:	<b>40 mm</b>
Measuring force:	<b>0.75 mN</b>
Interface:	<b>RS-232 C interface for input/output, DIGIMATIC output, Compact flash card</b>
Profiles:	<b>Primary Profile (P), Roughness Profile (R), DIN 4776, MOTIF</b>
Display range:	<b>Ra, Rq: 0.01 <math>\mu</math>m - 100 <math>\mu</math>m Ry, Rz, Rt, Rv, R3z, Rk, Rpk, Rvk, R, Rp, Rx, AR, W, Wx Wte: 0.02 <math>\mu</math>m - 350 <math>\mu</math>m</b>

	<p>S, Sm: 2 <math>\mu</math>m - 4000 <math>\mu</math>m  HSC, Pc: 2.5/cm - 5000/cm;  Ppi: 6.35 - 12700/inch  dc: - 350 <math>\mu</math>m - + 350 <math>\mu</math>m  Lo: 0.1 mm - 99999 mm  mr, Mr 1, Mr 2: 0 - 100 %  A1, A2: 0 - 15000</p>
Roughness standard:	EN ISO,VDA, ANSI, JIS
No. of sampling length (L):	x 1, x 3, x 5, x L
Digital filter:	2RC-75%, 2RC-75% (phase corrected), Gauss -50%
Cut-off length:	lc: 0.08 mm; 0.25 mm; 0.8 mm; 2.5 mm; 8 mm ls: 2.5 $\mu$ m; 8 $\mu$ m; 25 $\mu$ m
Printer:	Thermal Printer (Printing width: 48 mm)
Statistics:	Max/Min,Average value, Standard deviation (s), Pass Ratio, Frequency Distribution Table
Tolerance:	Upper/lower limit values for three parameters
Auto-sleep:	Automatic after 5 minutes
Inch-Metric:	Metric

## Accessories

### Optional accessories:



#### Granite stand for Surftest SJ-210 / SJ-310\*

178-029

Suggested retail price: 738.00 €\*



#### Adapter for magnetic stand; D8mm for Surftest SJ-210 / SJ-310

12AAA221

Suggested retail price: 45.00 €\*



#### Standard drive unit 17,5 mm for SJ-210 / SJ-310 series

178-230-3

Suggested retail price: 669.00 €\*



#### S-type drive unit 5,6 mm for SJ-210 / SJ-310 series

178-233-3

Suggested retail price: 2,388.00 €\*



#### S-type drive unit set for SJ-210 / SJ-310 series

178-234-3

Suggested retail price: 2,494.00 €\*



#### R-type drive unit 17,5 mm for SJ-210 / SJ-310 series

178-235-3

Suggested retail price: 1,295.00 €\*



#### Extension rod length 50mm for SJ-210 / SJ-310 series

12AAA210

Suggested retail price: 220.00 €\*

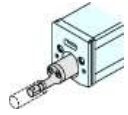


#### Standard detector 2 $\mu$ m; 0,75mN for SJ-210 / SJ-310 series

178-296

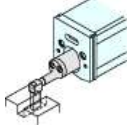


Suggested retail price: **594.00 €\***



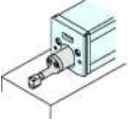
**Detector small holes D4,5; 2µm; 0,75mN  
for SJ-210 / SJ-310 series**

**178-383**  
Suggested retail price: **721.00 €\***



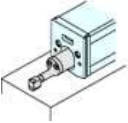
**Detector deep groove 2µm; 0,75mN  
for SJ-210 / SJ-310 series**

**178-385**  
Suggested retail price: **721.00 €\***



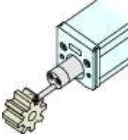
**Detector for S-drive 5µm; 4mN  
for SJ-210 / SJ-310 series**

**178-386**  
Suggested retail price: **573.00 €\***



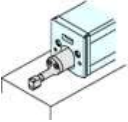
**Detector for S-drive 2µm; 0,75mN  
for SJ-210 / SJ-310 series**

**178-387**  
Suggested retail price: **637.00 €\***



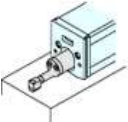
**Detector for gear tooth 2µm; 0,75mN  
for SJ-210 / SJ-310 series**

**178-388**  
Suggested retail price: **1,230.00 €\***



**Standard detector 5µm; 4mN  
for SJ-210 / SJ-310 series**

**178-390**  
Suggested retail price: **478.00 €\***



**Detector for soft materials 10µm; 4mN  
for SJ-210 / SJ-310 series**

**178-391**  
Suggested retail price: **478.00 €\***



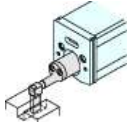
**Detector small holes D4,5; 5µm; 4mN  
for SJ-210 / SJ-310 series**

**178-392**  
Suggested retail price: **637.00 €\***



**Detector small holes D2,8; 5µm; 4mN  
for SJ-210 / SJ-310 series**

**178-393**  
Suggested retail price: **637.00 €\***



**Detector deep groove 5µm; 4mN  
for SJ-210 / SJ-310 series**

**178-394**  
Suggested retail price: **637.00 €\***












**Detector for gear tooth 5µm; 4mN  
for SJ-210 / SJ-310 series**

**178-398**  
Suggested retail price: **1,150.00 €\***



**Height adjustment feet  
for Surftest SJ-210 / SJ-310**

**12AAA216**

	Suggested retail price: <b>133.00 €*</b>
	<b>Nosepiece for flat surfaces for SJ-210 / SJ-310 series</b> <b>12AAA217</b> Suggested retail price: <b>90.00 €*</b>
	<b>Nosepiece for cylinder for SJ-210 / SJ-310 series</b> <b>12AAA218</b> Suggested retail price: <b>90.00 €*</b>
	<b>Adapter for vertical position for Surftest SJ-210 / SJ-310</b> <b>12AAA219</b> Suggested retail price: <b>45.00 €*</b>
	<b>Height gauge adaptor [mm] for Surftest SJ-210 / SJ-310</b> <b>12AAA222</b> Suggested retail price: <b>90.00 €*</b>
	<b>Connection cable for extension 1 m for Surftest SJ-210</b> <b>12BAA303</b> Suggested retail price: <b>75.00 €*</b>
	<b>Device for cylindrical workpieces for Surftest SJ-210 / SJ-310</b> <b>178-033</b> Suggested retail price: <b>2,833.00 €*</b>
	<b>Device as universal fixture</b> <b>178-034</b> Suggested retail price: <b>2,175.00 €*</b>
	<b>Device for measuring inside diameter</b> <b>178-035</b> Suggested retail price: <b>2,545.00 €*</b>