

**COPT** 

CENTER FOR ORGANIC ELECTRONICS | UNIVERSITY OF COLOGNE

# DATA SHEET

Stylus Profilometer

Bruker Corporation

Dektak XT

[copt-zentrum.de](http://copt-zentrum.de)



# 3D Mapping



## Technical Data

## Stylus profilometer

Company

Bruker Corporation

Model

Dektak XT

Application:

Tactile determination of the surface topography (layer thickness, waviness and roughness...) and 3D mapping on all solid surfaces

Stylus force:

1 to 15 mg with LIS sensor

Measuring length:

55 mm, through connection up to 200 mm

Max. sample size (W x L x H):

200 x 200 x 50 mm<sup>3</sup>

Stylus sensor:

Low Inertia Sensor (LIS3)

Stylus options:

Stylus radius options from 50 nm bis 25 µm; High Aspect Ratio (HAR) tips 200 µm x 20 µm

Sample X/Y stage:

100 mm X 100 mm X/Y, manual leveling (manual / motorized)

Sample r-theta stage:

Continuous 360 degrees (manual / motorized)

Data points per scan:

120.000 maximum

Step height repeatability:

4 Å, 1 sigma on steps  $\leq 1 \mu\text{m}$  (30 scans using a 12,5 µm stylus)

Vertical range:

1 mm

Vertical resolution:

1 Å (@ 6.55 µm range)

Besondere merkmale:

The unit is enclosed and mounted on a vibration damper

Sample viewing:

Digital magnification, 0.275 to 2.2 mm

Accessories:

Styli of different radii and designs, reference sample