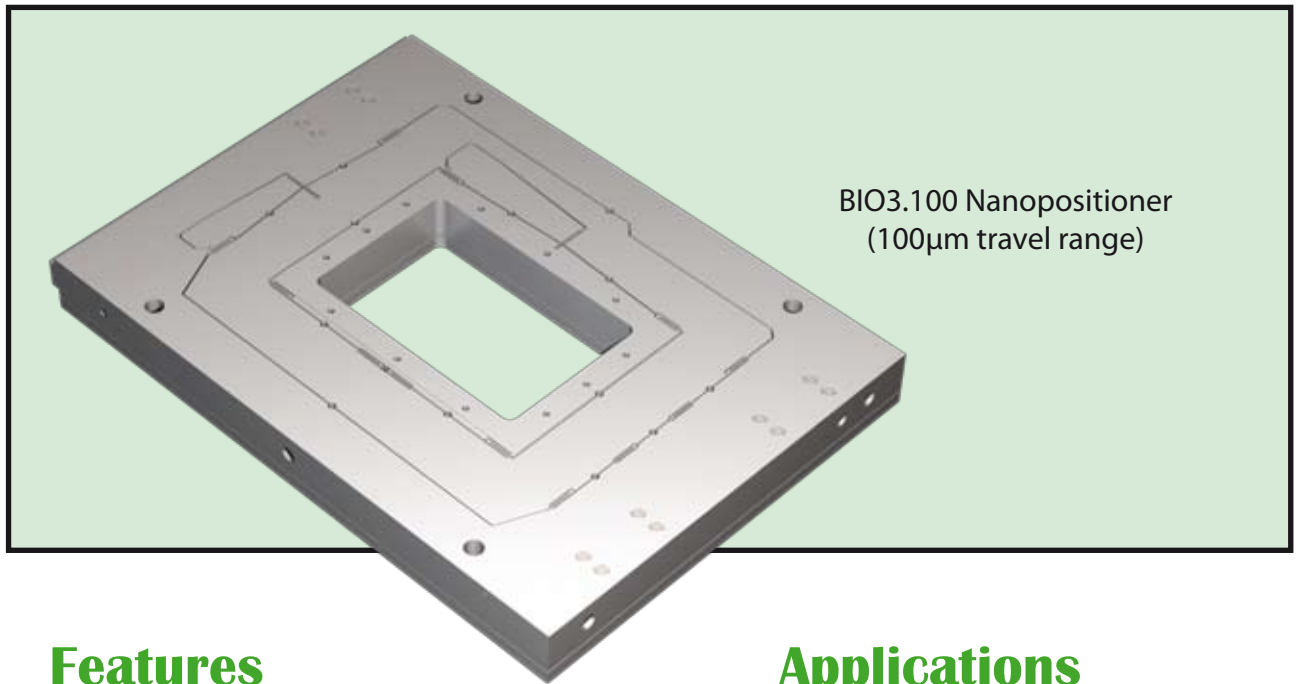


BIO3 NANOPositionER

The BIO3 is a 3-axis ultra-low profile nanopositioner designed to be integrated in any kind of inverted microscopes. Microscope slides can be accommodated inside its rectangular aperture. This piezostage can be proposed with a coarse positioning Microstage (See our Hybrid System - pages 34-35).

As standard, the BIO3 is made in Aluminium but for Bruker AFM upgrade, we can propose the BIO3.100 (100 μ m version) also in Invar, which leads to higher thermal stability.



Features

- Low profile
- Rectangular aperture (83mm x 53mm)
- 100, 200 or 300 μ m motion
- Closed loop control
- Silicon sensor technology
- Less than 30pm noise floor

Applications

- Super Resolution microscopy
- Nanolithography
- Particle tracking
- Confocal microscopy
- Atomic Force Microscopy
- Bruker AFM upgrade

Specifications

	BIO3.100	BIO3.200	BIO3.300
Range of motion XYZ (μm)	100	200	300
Resolution XYZ (nm)	0,1	0,2	0,3
Typical noise floor XYZ (nm)	0,01	0,02	0,03
Full range repeatability XYZ (nm)	0,2	0,4	0,6
Linearization (typical)	0,02%	0,02%	0,02%
Resonant frequency X/Y/Z (Hz)	500/400/400	400/350/300	300/250/250
Stiffness X/Y/Z (N/ μm)	0,6/0,5/0,5	0,5/0,4/0,4	0,4/0,3/0,3
Maximum load (kg) - horizontal use	1	1	1
Maximum load (kg) - vertical use	0,5	0,5	0,5
Sensor	Silicon HR sensor	Silicon HR sensor	Silicon HR sensor
Size W x L x H (mm)	152,5 x 213 x 20,45	152,5 x 213 x 20,45	152,5 x 213 x 20,45
Material	Al or Invar	Al	Al
Cable length (m)	2	2	2
Recommended Controller	Standard	Standard	Standard

Drawing

