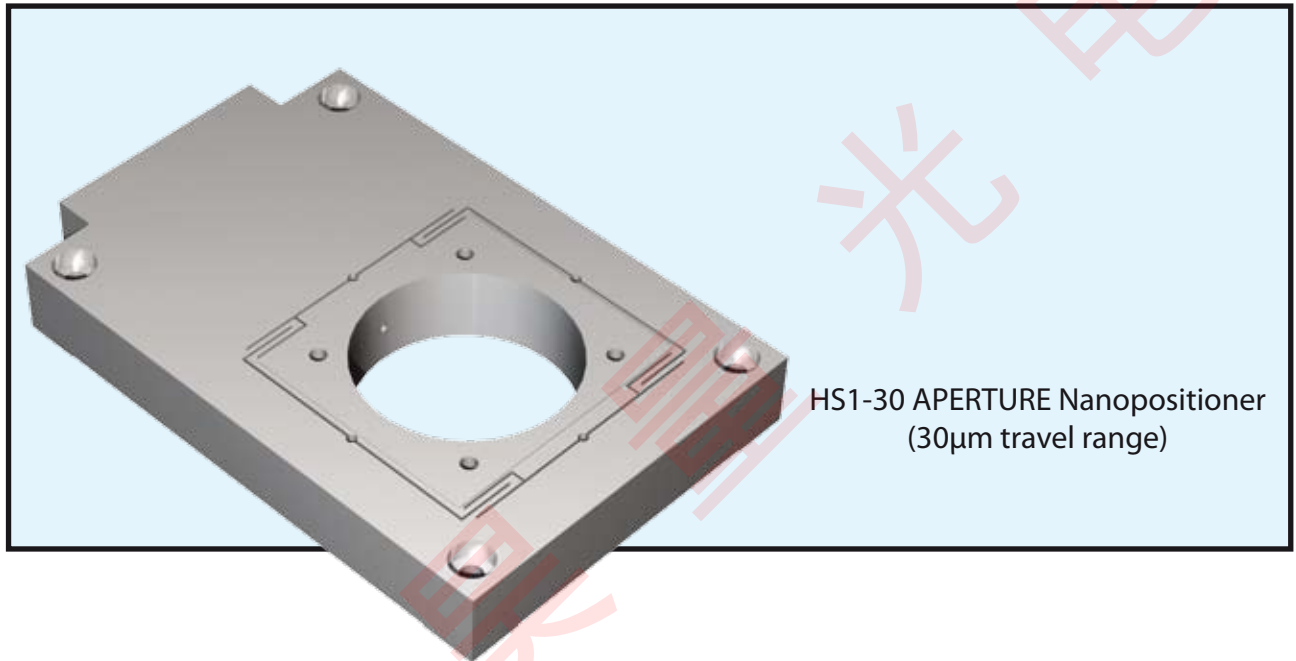


# HS1-APERTURE NANOPositionER

The HS1-APERTURE is a compact nanopositioner which can be combined to form 2 or even 3-axis nanopositioning systems. It is offered with 30, 50 or 70 $\mu$ m of range of motion and has a central aperture of 33mm, making it ideal for optical microscopy applications.

This nanopositioner is part of our high-speed product line (High power controller available).



## Features

- High speed, direct drive
- Diameter of the aperture : 33mm
- Stackable for XY or XYZ motion
- 30, 50 or 70 $\mu$ m motion
- Closed loop control
- Silicon sensor technology
- Less than 10pm noise floor

## Applications

- Interferometry
- Nanolithography
- 3D polymerisation
- High speed focusing
- Adaptative optics

## Specifications

	HS1.30 APERTURE	HS1.50 APERTURE	HS1.70 APERTURE
Range of motion ( $\mu\text{m}$ )	30	50	70
Resolution (nm)	0,03	0,05	0,07
Typical noise floor (nm)	0,003	0,005	0,007
Full range repeatability (nm)	0,06	0,1	0,14
Linearization (typical)	0,02%	0,02%	0,02%
Resonant frequency (Hz)	4000	4000	4000
Stiffness (N/ $\mu\text{m}$ )	3	3	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)	62,5 x 96,10 x 12,6	62,5 x 116,10 x 12,6	62,5 x 138,10 x 12,6
Material	Al	Al	Al
Cable length (m)	2	2	2
Recommended Controller	Standard or High Speed	Standard or High Speed	Standard or High Speed

## Drawing

