# Nano-HL Series

#### Features

- Heavy load capacity up to 10kg
- ▶ Single axis motion
- ▶ Long range motion up to 200µm
- ▶ Closed loop control
- pico sensor technology

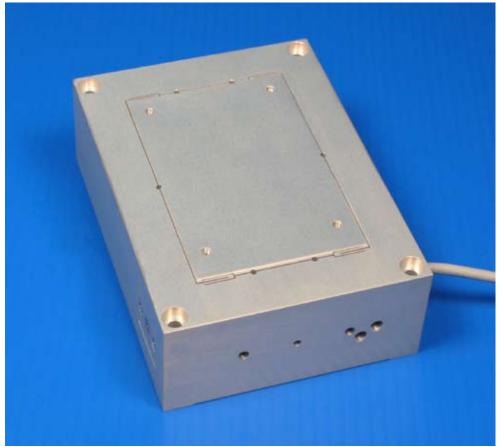
### **Typical Applications**

- Precise positioning of heavy optics or sensor assemblies
- Off-axis loading with high positional stability

LabVIEW Compatible USB Interfaces

interfaces.

Examples, tutorial, and Nano-Route<sup>\*</sup>3D supplied with Nano-Drive<sup>\*</sup> USB



Nano-HL200 constructed from aluminum.

## **Product Description**

The Nano-HL Series single axis stages are heavy duty nanopositioners designed to carry loads weighing up to 10kg. Build from a single block of aluminum nearly 2 inches (50mm) thick, the Nano-HL has enough physical rigidity to counteract large off-axis loads while continuing to produce precise, high resolution movements. Internal position sensors utilizing proprietary **picp** technology

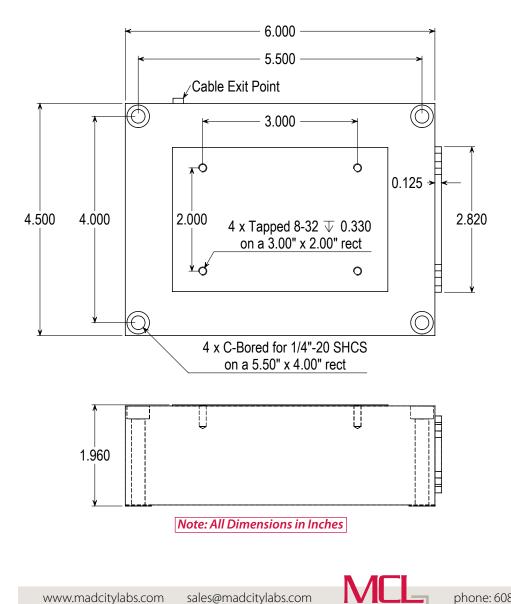
provide absolute, repeatable position measurement with sub-nanometer resolution under closed loop control. The Nano-HL Series stages can be operated in any orientation and may be customized to fit specific installations and special mounting requirements.



## **Technical Specifications**

Range of motion (Nano-HL50)	50 μm
Range of motion (Nano-HL100)	100 μm
Range of motion (Nano-HL200)	200 μm
Resolution (50/100/200 µm)	0.1/0.2/0.4 nm
Resonant Frequency	450 Hz ±20%
Stiffness	1.0 N/µm
Recommended max. load (horizontal)*	10 kg
Recommended max. load (vertical)*	10 kg
Body Material	Aluminum
Controller	
*	

Larger load requirements should be discussed with our engineering staff.



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