

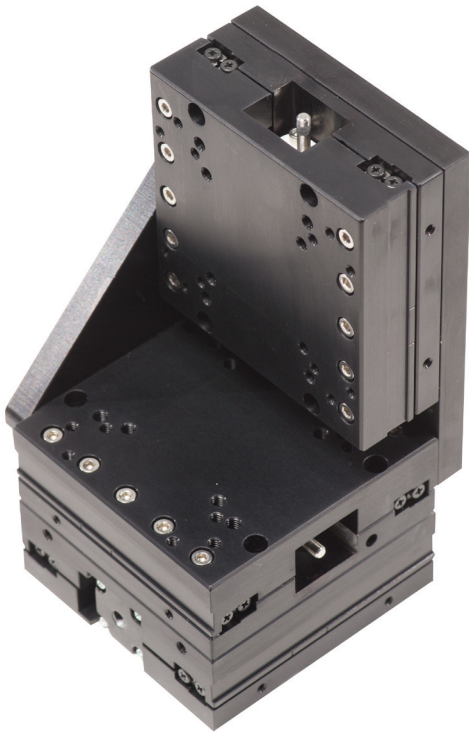
# MMP Series

## Features

- ▶ 1, 2, or 3 axis configurations
- ▶ Range of motion: 25mm
- ▶ Optional encoders: 50 nm resolution
- ▶ Proprietary intelligent control for stability
- ▶ High native precision & accuracy
- ▶ Nanopositioner compatible

## Typical Applications

- ▶ Complex, programmed motion control
- ▶ High precision positioning
- ▶ Automation



The MMP Series with optional encoders for high precision motion control.  
(above) MMP3, (right) MMP2-50E and MMP1

**Compatible Software Packages**

Examples supplied for the Micro-Drive™ controller



## Product Description

The MMP Series are a precision, stepper motor driven, micropositioning system for high precision positioning for a variety of applications. Long range linear positioning is provided in one, two or three axis configurations with high resolution and excellent repeatability. Employing our proprietary intelligent control scheme results in exceptional stability with high native precision making our MMP Series the ideal choice for demanding motion control applications. Optional high resolution (50nm) linear encoders provide real-time feedback of the actual

stage position. The included Micro-Drive™ controller connects to a PC via a standard USB port and can be controlled via the supplied LabVIEW based software. Complex motion profiles can be programmed and sophisticated control parameters such as automatic acceleration and deceleration is employed to achieve high stability and native accuracy. Optional wireless gamepad control is also available. The MMP Series is compatible with a wide range of our nanopositioning systems and can be customized to your requirements.

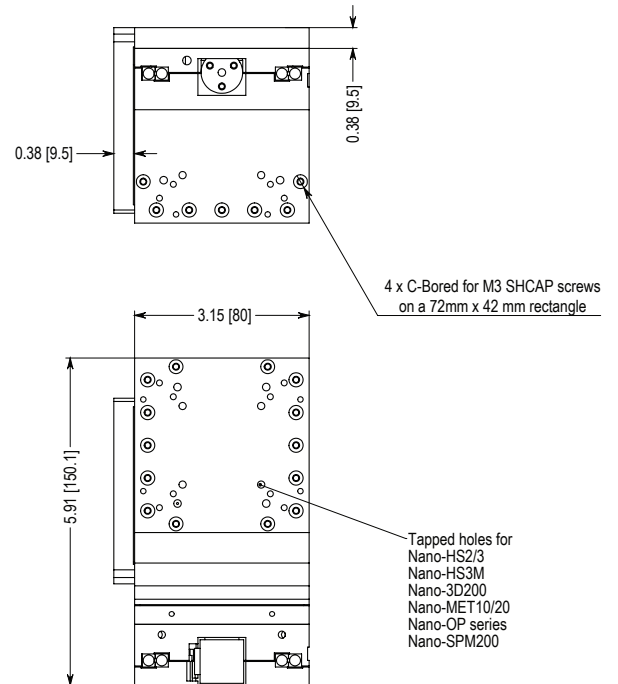
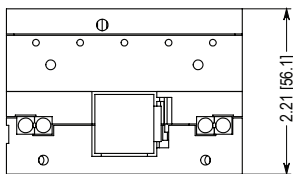
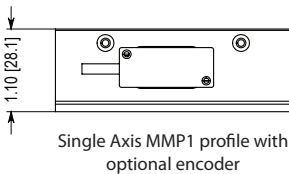
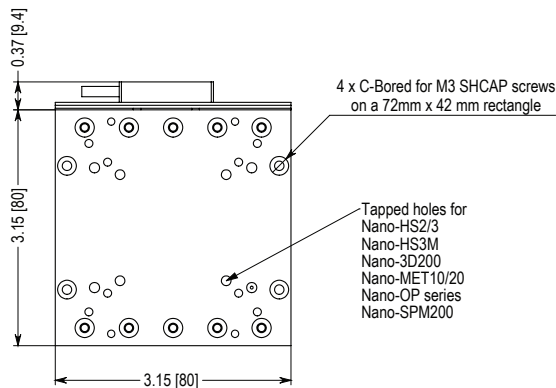
# Technical Specifications

Range of motion (X,Y, Z).....	25 mm
Encoder Resolution (optional).....	50 nm
Step Size.....	95 nm
Maximum Speed .....	4 mm/sec
Native Accuracy .....	< 4 μm
Native Repeatability .....	< 100 nm
Recommended max. load (horizontal)* .....	10 kg
Recommended max. load (vertical)* .....	2 kg
Body Material .....	Aluminum
Controller .....	Micro-Drive™

\* Larger load requirements should be discussed with our engineering staff.



Three axis Micro-Drive™3 controller includes a USB port for direct connection of the Micro-Drive™ controller to a PC. LabVIEW and 3rd party software compatible.



Three axis MMP3 showing top view and profile.

**Note: All Dimensions in Inches [mm]**