



HS-100 Motorized Rotary Stage

The HS-100 motorized rotary stage has a large clear aperture and offers high-speed operation. A stepper motor with a timing belt generates fast, repeatable motion. A micro-stepping driver and gear reduction enables precise rotary positioning. The stage is supplied with a high-torque 200 step (1.8° per step) motor. The stage can be run open loop or an encoder (pictured) can be added for closed loop positioning. Dual angular contact bearings support both radial and thrust loads so the stage can be operated horizontally or vertically. This stage is ideal for positioning and rotating 100mm/4" optics. Applications include simulating atmospheric propagation using Lexitek's Turbulence Phase Plates.

SPECIFICATIONS

- 6"x10"x 2" footprint except at the motor which adds 1.75" thickness, encoder adds 0.7" thickness
- Optic holder with 4" bore, 3.75" clear aperture
- Dual precision bearings with angular contact races
- Stepper motor 2 A/phase, 83 oz-in torque
- Timing belt drive with no backlash or lubrication, 3:1 gear ratio
- 1-8X microstepping drive for smooth motion, 12-24V
- Variable speed and direction using logic (TTL) inputs for step and direction
- Rotation rates to 300 rpm guaranteed, >400 rpm typical
- Integrated reflective optical home sensor
- Optional encoder with 32-2500 cycles per revolution

Please consult us if your requirements call for different specifications or if you need custom engineering of this product or related products.

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