

Motorized, Fast-Change Filter Wheel



Thorlabs' FW103H and FW103S bundles include a motorized fast-change filter wheel designed for applications requiring sequential filter changes, such as multi-wavelength fluorescence imaging and a stepper motor controller for the filter wheel. The light-tight housing can accept up to six Ø1.0" (Ø25 mm) filters, including the MF series of excitation and emission filters (see page 702). Additionally, the housing cover can be removed to facilitate filter changes without removing the entire assembly from the optical setup.

FW103H Bundle

This bundle packages the fast-change filter wheel with a high-powered stepper motor controller (BSC101), which provides a switching time of 55 ms (typ.) between adjacent filters.

FW103S Bundle

This bundle packages the fast-change filter wheel with the TST001 T-Cube Stepper Motor Controller. This controller provides a switching time of 250 ms (typ.) between adjacent filters. The power supply for the TST001 is sold separately.

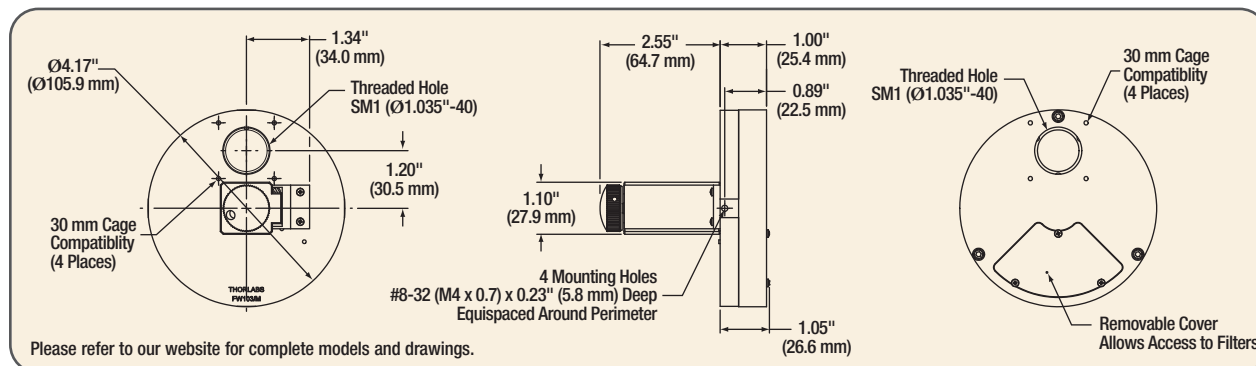
The controllers from both bundles provide the ability to fine tune the filter wheel's acceleration and speed for optimal performance.

Features

- 55 ms Typical Switching Speed Between Adjacent Ports
- Holds up to Six Ø1" (Ø25 mm) Filters
- Light-Tight Design
- Accepts Filters up to 0.25" (6.35 mm) Thick



The FW103H and FW103S are compatible with Thorlabs' SM1 Lens Tube Systems, 30 mm Cage Components, and TR Series of Posts (Pages 123, 155, and 88, respectively).



ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
FW103H	FW103H/M	\$ 1,595.00	£1,105.50	€ 1,416.00	¥ 13,469.00	Fast Motorized Filter Wheel and High-Current BSC101 Controller
FW103S	FW103S/M	\$ 807.50	£ 559.80	€ 717.00	¥ 6,818.60	Fast Motorized Filter Wheel and T-Cube TST001 Controller
TPS001	-	\$ 25.00	£ 17.40	€ 22.20	¥ 211.20	15 V Power Supply for a Single T-Cube
TCH002	-	\$ 726.90	£ 504.00	€ 645.40	¥ 6,138.00	T-Cube Hub, Power and USB for up to Six T-Cubes

BSC101 apt™ Benchtop Controller



The BSC101 apt™ controller is a single-channel 50 W stepper motor controller designed to drive high-power, 2-phase bi-polar stepper motors, with or without encoder feedback. It has been designed to drive the higher power stepper motor equipped nanopositioning actuators and stages offered by Thorlabs as well as any generic two-phase bi-polar motor of varying powers and varying cardinal step sizes, making this a very flexible unit.

USB connectivity provides easy plug-and-play PC operation. Multiple units can be connected to a single PC via standard USB hub technology for multi-axis motion control applications, and the very user friendly apt™ software allows the user to quickly get up and running with reasonably complex move sequences. Advanced custom motion control applications and sequences are also possible using the extensive ActiveX® programming environment described in more detail on the Software and Video Tutorials at thorlabs.com. For more information on the BSC101, see page 548.

ITEM#	\$	£	€	RMB	DESCRIPTION
BSC101	\$ 1,285.00	£ 890.80	€ 1,140.90	¥ 10,851.00	One-Channel apt™ Stepper Motor Controller