

Dichroic Filter Wheel

Similar to the FW103 High-Speed Filter Wheel on the previous page, the FW104 is designed to hold multiple optical filters for microscopy applications but is specifically designed to hold rectangular dichroic mirrors (see page 846). This fast filter wheel allows the user to assemble a custom fluorescence imaging system easily. Fitting SM1 lens tubes or 30mm cage systems to the input and output ports of the filter wheel housing allows rapid prototype setup of custom imaging systems. This dichroic wheel is easily mounted using the four tapped holes (either 8-32 UNC or M4).

Up to six 1" x 1.4" (25mm x 35.5mm) filters (e.g. Thorlabs FDF Series – see page 641) can be fitted into the wheel, which are easily accessed through the removable cover without needing to remove the filter wheel from the optomechanical setup.

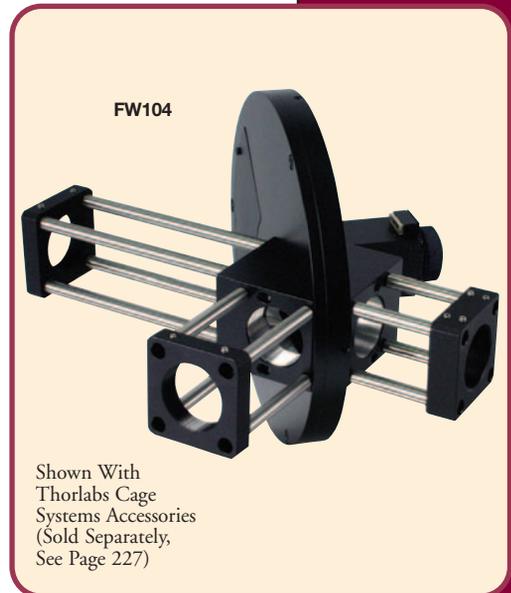
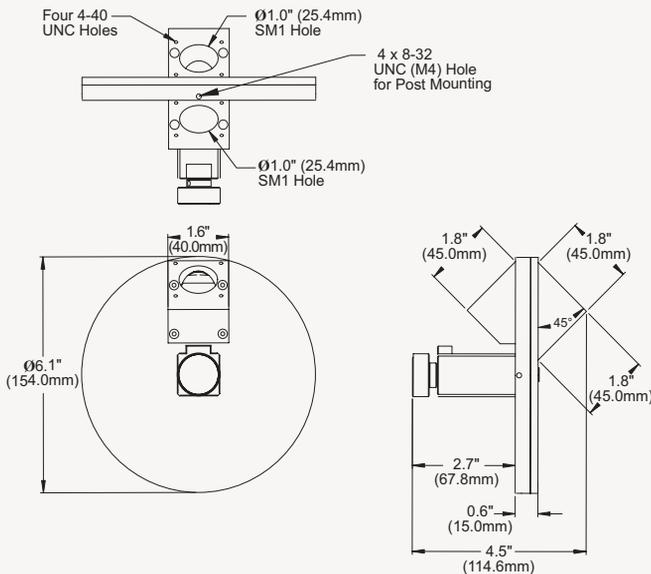
This filter wheel can be used on its own, or in conjunction with two FW103 high-speed filter wheels, to make a powerful, high-speed fluorescence filter system capable of sequentially imaging samples at different wavelengths at close to video rates.

Choosing the proper electronic controller for the FW104 depends on the required speed of operation. For high-speed (50-60ms) switching between adjacent filters, the BSC101 apt™ stepper motor controller should be used (see page 366). For 250ms switching, the TST001 T-cube stepper motor controller should be used (see page 350). Both controllers provide the ability to fine tune filter wheel acceleration and speed for optimum performance. The T-cube stepper controller front panel can also be used to control the filter wheel without the need for an external PC connection.



Features

- Holds Up to Six 1" x 1.4" Planar Dichroic Mirrors
- High-Speed Operation Compatible With BSC101 Controller
- Easy Integration With Thorlabs' SM1 Lens Tube System, 30mm Cage System, and Post Mounting System
- Easy Access to Add or Remove Filters Without Removing Wheel From Setup
- Hall Effect Switches for Home & Position Indexing



Specifications

- 55-60ms Transition Time Between Adjacent Filters Using BSC101 Controller
- 250ms Transition Time Between Adjacent Filters Using TST001 T-Cube Controller

ITEM#	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
FW104	FW104/M	\$ 530.00	£ 333.90	€ 492.90	¥ 5,061.50	Dichroic Filter Wheel
FW104H	FW104H/M	\$ 1,630.00	£ 1,026.90	€ 1,515.90	¥ 15,566.50	Dichroic Filter Wheel and High-Current BSC101 Controller
FW104S	FW104S/M	\$ 1,030.00	£ 648.90	€ 957.90	¥ 9,836.50	Dichroic Filter Wheel and Low-Current TST001 Controller