FW-1000 High Speed Filterwheel

ASI's FW-1000 filter wheel utilizes a closed-loop DC servomotor to provide high speed (less than 40 milliseconds between adjacent positions) and low vibration operation (less than 3 x 10-4 kg-m2/s maximum vibration torque impulse). The unit employs a high-resolution rotary encoder for positional feedback and utilizes non-volatile flash memory to store programmable filter sequences and delays. Motion can be triggered by TTL input pulse, and the controller will output a TTL sync pulse upon arrival at the commanded filter position. The closed loop design allows for precise control of speed and velocity profiles. Wheels are available to hold eight 25 mm, or six 32mm, filters (16 filter holder available as well). Optional high-speed shutters can be added, and multiple wheels can be controlled from a single controller. Adapters are available to attach the system to the excitation or emission ports of any research grade microscope, and the unit can be easily configured for OEM applications.

Options

- 16-Position Filter Wheel Disk for 25 mm diameter filters
- 8-Position Filter Wheel Disk for 25 mm diameter filters (standard)
- 6-Position Filter Wheel Disk for 32 mm diameter filters
- Built-in High Speed Shutter

Specifications

Minimum Switching Time		< 40 ms
Maximum Vibration Torque Impulse		< 3 x 10-4 kg-m2/s
Dimensions	Filter Wheel	203 mm x 118 mm x 29 mm
	Controller	140 mm x 235 mm x 267 mm
Electrical	Voltage	110-240 VAC, 50-60 Hz
	Power	160 Watts

Features

- Very Low Vibration
- Fast Switching (<40 ms between adjacent filter positions)
- Simple TTL Interface
- RS-232 Programmable Filter Sequence
- Each Controller Module can operate two Filter Wheels
- Excitation and Emission Adapters available for nearly all research-grade microscopes