# Fiber-optic Multiplexer (FOM)

To configure systems which enable a single light source and spectrometer to make multi-point serial measurements, Avantes offers the FOM fiber-optic multiplexer. The device is available in three different configurations: 1 input to 16 outputs, 2 inputs to 8 outputs or 4 inputs to 4 outputs. The FOM consists of a precisely controlled stepper motor and a rotary block. The optical path is coupled through multiple COL-UV/ VIS collimating lenses.

The fiber-optic multiplexer is controlled via a USB-connection to a PC. The FOM software enables full control over the

switching order, switching time and delay time and operates as a stand-alone unit. To integrate the FOM with AvaSpec spectrometers and your own devices the FOM-DLL software development kit is available and should be ordered separately.

Applications for the FOM include process control, where multiple locations need to be measured with multiple probes, all with one spectrometer and/or light source.

#### FOM-UVIR400-2x8



#### **Technical Data**

	FOM-UVIR400-1x16	FOM-UVIR400-2x8	FOM-UVIR400-4x4
<b>Multiplex Channels</b>	1 x 16	2 x 8	4 x 4
Optical Throughput	> 60 % (based on 400 µm fibers)		
Wavelength Range		200-2500 nm (UV/VIS/NIR)	
Fibers	Standard max. 400 $\mu m$ , different dimensions available on request		
Connectors		All SMA-905	
Optical Repeatability		> 99%	
Switching Time	< 225 ms between adjacent positions		
Interface		USB 2.0	
Power Requirement		100-230 VAC, 60VA	
Dimensions		244 x 144 x 354 mm	

### **Ordering Information**

FOM-UVIR400-1x16	• Fiber-optic Multiplexer, 1 x 16 channels, 400 μm fibers
FOM-UVIR400-2x8	• Fiber-optic Multiplexer, 2 x 8 channels, 400 µm fibers
FOM-UVIR400-4x4	• Fiber-optic Multiplexer, 4 x 4 channels, 400 µm fibers

## **Options**

**FOM-DLL** 

• Interface DLL package for Fiber-optic Multiplexer (FOM-UVIR400-1x16 and FOM-UVIR400-2x8, and FOM-UVIR400-4x4) for Windows

