

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 |
|------------------------------|---|-----------------|-----------------|
| Multiplex Channels | 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 µm, different dimensions available on request | | |
| Connectors | All SMA-905 | | |
| Optical Repeatability | > 99% | | |
| Switching Time | < 60 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 |
|----------------|---|