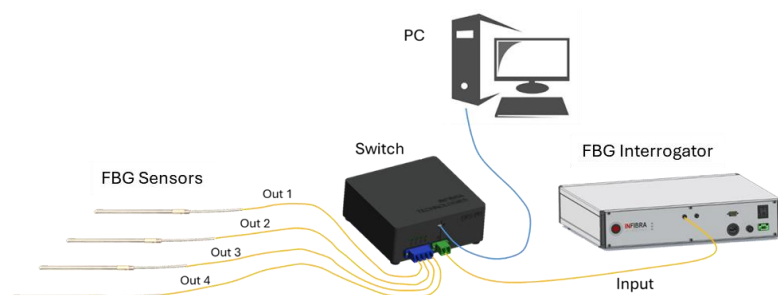


OFS-M1

Fiber Optical Switch for FBG sensors systems

The OFS-M1 is an opto-electronic device that allows to direct the optical signal from an input port to one of its output ports. In particular, it acts as a dynamic light path switch controllable through a PC connected to the device via USB port.

One of the typical systems in which the switch is inserted is shown in the following figure. In this type of application, the device is used to expand the monitoring capacity of a fiber optic sensor interrogator, allowing the management of a greater number of connected fibers and therefore of optical signals coming from different sensors.



Two of its distinguishing features are the wide range of operating wavelengths from 1250 nm to 1670 nm and the typical switching time of the order of 10 ms. These two features are of particular interest both in optical communication applications, as it operates in the II and III window, and in applications connected to sensors because it allows a fast channel scanning ensuring an optical band compatible with all interrogators operating in the C and L bands used in telecommunications.

Several options can be offered, including more inputs/outputs. Contact us for more information.

TECHNICAL SPECIFICATIONS

Wavelength Range	1250 ÷ 1670 nm
Number of Input Channels	1
Number of Output Channels	4
Insertion Loss	0.5 dB (typical)
Repeatability	± 0.1 dB
Switching Time	10 ms (typical)
Fiber optic type	SFM-28e
Power Supply	+5 V _{DC} (micro-USB)
Power Consumption	500 mW
Operating Temperature	-10 ÷ 70 °C, 5 ÷ 95% RH non condensating
Warm-up time	5 s
Dimensions	125 mm x 52.6 mm x 136 mm
Weight	100 g
Communication	USB - Driver Labview included
Input Optical Connector	LC/APC
Output Optical Connectors	LC/APC
Certifications	CE

