



OZ Optics

shop.ozoptics.com
www.ozoptics.com



Elliot Scientific Ltd
Unit 11 Sandridge Park,
Porters Wood, St Albans,
AL3 6PH, United Kingdom
Tel: +44 (0)1582 766300
Fax: +44 (0)1582 766340
www.elliotscientific.com
sales@elliotscientific.com

MULTI-CHANNEL POLARIZED SOURCE FOR MPO/MTP® PM FIBER PATCHCORDS

PRELIMINARY

Features

- Turnkey Multi-Channel Polarized source
- Polarization extinction ratio up to 35 dB
- 12, 16 or 24 channels with customer specified interface adapter
- Temperature controlled sources for Excellent Power Stability
- Intuitive Graphical User interface
- Optional output power adjustment
- Optional High power versions

Applications

- Fiber optic component manufacturing and quality control
- Extinction ratio measurement
- Photonic Integrated Circuits (PIC)
- Fiber Sensing and photonic system.
- Component or system troubleshooting



**Multi-Channel Polarized Source
for MPO/MTP® PM Fiber Patchcords**

Product Description

OZ Optics offers a turnkey multi-channel polarized fiber optics source with 12, 16 or 24 channels for testing the polarization properties of polarization maintaining (PM) MPO/MTP® patchcords, V-Groove arrays and custom fiber arrays. The source contains individually controllable polarized sources combined internally to a common output multi-fiber connector. The unit is offered with customer specified channels and terminated with a customer specified interface adaptor. The source enables quick polarization ER characterization of multi-channel PM fiber patchcords with defined fiber pitch separation. The source comes with a Windows based application that allows easy operation using a user's computer.

The sources can be configured with customer specified fiber port adaptors.

For our automated polarization extinction ratio measurement test sets for V-grooves assemblies and MPO/MTP® patchcords please refer to the following link: https://www.ozoptics.com/ALLNEW_PDF/DTS0216.pdf

Standard Product Specifications for Multichannel Polarized Sources¹:

Part number: MCPFOS-01-MPO-16-1550-1-ER=33	
Parameter	Value
Laser Type ²	Fabry-Perot Laser
Central Wavelength ³	1550 nm $\pm$ 20 nm
Extinction Ratio	33 dB
Output Power	0.7 to 1 mW
Polarizer Type	FIX
Spectral Bandwidth (at FWHM)	< 5 nm
Short Term Stability ⁴	$\pm$ 0.1 dB
Long Term Stability ⁵	$\pm$ 0.25 dB
Connector Type	MPO receptacle
Input Voltage	Universal 110/220 Volt AC to DC adapter
Dimensions (LXWXH)	39 X 34.4 X 13.3 cm
Weight	14 kg
Operating Temperature	10 to 40°C
Storage Temperature	-40 to 80°C
Relative Humidity	< 90% RH non condensing

¹ Reference condition: 23°C ambient temperature after 30 minutes warm-up period

² DFB and SLED lasers are also available as a custom order.

³ Depends on laser diode manufacturer and temperature operation.

⁴ 15 minutes at constant temperature and after 30 minutes warm-up period

⁵ 6 hours at constant temperature and after 30 minutes warm-up period

Ordering Information for Custom Parts

OZ Optics welcomes the opportunity to provide custom designed products to meet your application needs. As with most manufacturers, customized products do take additional effort so please expect some differences in the pricing compared to our standard parts list. In particular, we will need additional time to prepare a comprehensive quotation, and lead times will be longer than normal. In most cases non-recurring engineering (NRE) charges, lot charges, and a 1 piece minimum order will be necessary. These points will be carefully explained in your quotation, so your decision will be as well-informed as possible. We strongly recommend buying our standard products.

Questionnaire for Custom Parts

1. What wavelength are you using?
2. What is the minimum acceptable polarization extinction ratio for the source?
3. What should be the minimum extinction ratio rating of the polarization extinction ratio meter?
4. What type of connector are you using on the source side?
5. What type of connector are you using on the detector side?
6. Do you need a custom mount?
7. Do you need a removable receptacle adaptor on the meter side?

Description

Part number

Multichannel Polarized Sources:

MCPFOS-01-X-N-W-P(-ER=ZZ)¹

X = Connector Type:
MPO = for MPO
MTP = for MTP

N = Number of Channels:
12 = 12 Channels
16 = 16 Channels

W = Wavelength:
1550 = 1550 nm
1310 = 1310 nm

ZZ = Extinction Ratio:
None if 30 dB is required.
If an ER > 30 dB is required, enter
ER = 35 for ER=35 dB

P = Output Power in mW:
1 = For 1 mW power output

Consult factory for special connector and ferrule adaptors.