

High-Speed Dynamic Polarization Controller & Driver Board

Optowaves' dynamic polarization controller is based on PZT squeezed technology. It consists of 2 or 4 squeezing units at 0° or 45° which can realize arbitrary polarization transformation. There is a large improvement in terms of speed and accuracy through the electronic control method to adjust the polarization.



Features

- Compact Size
- Minimal insertion loss
- Low active loss
- Fast response
- Electronic control

Applications

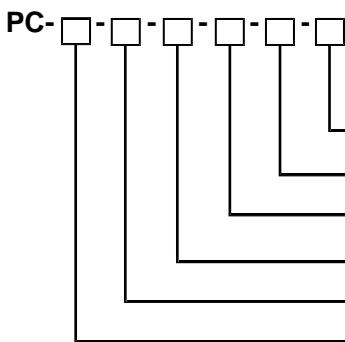
- PMD compensation/ emulation
- Polarization control
- Polarization scrambling
- Fiber sensor
- PDL measurement
- Testing equipment

Specifications:

Optical	Unit	Specifications
Insertion Loss	dB	< 0.05 (without connectors)
Return Loss	dB	> 65
Extinction Ratio	dB	> 20
Wavelength	nm	1260 to 1360 standard, others specify
Active Loss	dB	< 0.05
Polarization Mode Dispersion	ps	< 0.05
Polarization Dependent Loss	dB	< 0.1
Polarization Control Range	π	0 ~ 2 each channel
V π at DC	V	35 max.
Fiber Type	--	SMF-28e+, others specify
Electrical	Unit	Specifications
Power Supply	--	12V DC/ 0.2A , 150V DC/ 0.5A
Analog Input Voltage Range	V	0 ~ 5
Input Impedance	KΩ	≥ 100
Analog Input Gain	--	30 V/V ± 1%
Output Voltage Range	VDC	0 to 150
Output Impedance	Ω	50
Output Current	mA	0 to 60
15V Output Response Time	μs	7.5 (Rise/fall time)
150V Output Response Time	μs	75 (Rise/fall time)
Noise	mV	< 37 (RMS)
Environmental & Physical	Unit	Specifications
Operating Temperature	°C	0 ~ +50
Storage Temperature	°C	-20 ~ +60
Dimensions (L x W x H)	mm	52.9 x 20.2 x 2.5 (4-PZT version)
		33.0 x 20.2 x 21.4 (2-PZT version)
		150 x 83 x 30 (Drive Board)

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Ordering Information



- ▶ Connectors: FC/APC, FC/UPC, SC/APC, SC/UPC or others
- ▶ Fiber Length: 1=1.0m, 2=2.0m or others
- ▶ Cable Type: 025: Φ 0.25mm, 09: Φ 0.9mm
- ▶ Wavelength: 13:1310nm, 15:1550nm or others
- ▶ Version: 2=2-PZT, 4=4-PZT
- ▶ Type: PS: PZT Squeezed