

# **High Speed Polarization Controller**

### **Product Description**

Agiltron polarization controller converts any input state of polarization to any selectable output state of polarization by applying a set of electrical driving signals. It is based on 4 fast speed non-mechanical and highly stable electro-optical birefringence phase retardation plates. With a Agiltron firmware, it achieve endless polarization controlling, maintaining a constant output polarization without the need for resetting. The polarization controller is designed to meet the operation requirements of fast response and continuous operation to provide an ultimate solution for polarization selection. The device comes with 5V individually control circuit.

#### **Features**

- No Moving Parts
- High Reliability
- Solid-State High Speed
- Low Insertion Loss
- Compact Size
- Low Power Consumption

### **Performance Specifications**

Polarization Controller	Min	Typical	Max	Unit
Wavelength	1250		1650	nm
Insertion Loss <sup>1</sup>		1.8	3	dB
Polarization Dependent Loss			0.2	dB
Return Loss	45	50		dB
Response Time	0.3	•	1	ms
Operating Optical Power			500	mW
Operating Temperature	-5* ~ 70			°C
Storage Temperature	-40 ~ 85			°C
Package Dimensions	45X145			mm
Input Fiber Type	(	SMF-28		
Output Fiber Type	F	PMF		

1. Excluding connectors.

#### **Applications**

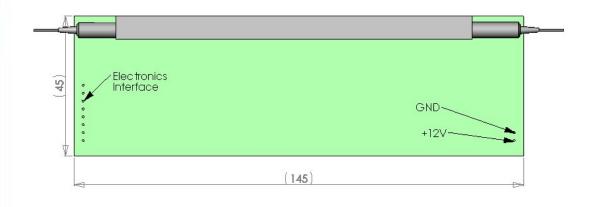
- Polarization Scrambler
- Polarization Management
- Polarization Mode dispersion compensation
- Instrumentation

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# **Polarization Controller**

### Mechanical Dimensions (mm)



### **Electrical Driver Inputs**

Control Signal	0-5V		
Power Supply	12V, 0.3A		

## Ordering Information

NOPC-	11		1	1	1			
	Туре	Wavelength	State	Package	Fiber Type		Fiber Length	Connector
		1310 = 3 1550 = 5 Special = 0			SMF-28 =1 Special=0	Bare fiber =1 900um loose tube=3 Special=0	0.25m= 1 0.5m = 2 1.0 m= 3 Special =0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0

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www.agiltron.com