Motorized Polarization Controller

PC1300

PC1300 is designed to manipulate the polarization states by either manual adjustment or remote control. Fiber optic quarter-wave plates are driven by motors.

Either by applying analog voltage or by RS232 control, you can remotely control the angular positions of the wave plates. The MPC offers convenient **save and recall** functions with built-in memory. It also provides **auto scan** mode at variable scanning speeds with low insertion loss (less than 0.5 dB) and high polarization extinction ratio. Its compact size enables the MPC to be installed on an electric circuit board.

Features

- All-fiber configuration
- High Return Loss
- High Extinction Ratio
- Automatic full range scan
- Low Insertion Loss
- Compact size
- Remote Control with analog voltage input
- RS232 Remote control

FIBERPRO

Applications

- Polarization control for optical devices to match polarization state.

- Remoting control of polarization state by computer.

- Polarization control for fiber optic interferometers.

- Analog feedback for automatic system stabilization.

Specifications

Operating Wavelength Range	1520 ~ 1620 nm
Insertion Loss	< 0.3 dB [1)
Insertion Loss Variation (during rotation)	< -0.02 dB [1)
Polarization Extinction Ratio	> 20 dB (> 25 dB typical)
Return Loss	> 60 dB (Without Connector)
Rotational Resolution	0.225 °/ step
Rotational Accuracy	-0.225 °/ step or 0.225 °/ position
Rotational Speed	< 7000 steps per sec. (1575 °/ sec)
Power Supply	12 V
Remote Interface	Analogue Voltage Control / RS232
Dimensions (W x D x H)	184mm x 106mm x 23.5mm

1) Without connector spec

The specifications and technical information contained herein are subject to change without notice
and are furnished without charge or obligation. They are given and accepted at recipients sole risks.

Ordering Code

PC1300-(1)

1. Connector type ➡ FC/PC(F/P), FC/APC(F/A), SC/PC(S/P), SC/APC(S/A), No connector(X)

Example : PC1300-F-P

➡ Motorized Polarization Controller with FC/PC connectors