

Motorized Polarization Controller

This orthodox polarization controller consists of a combination of polarization control elements, such as polarizers, $\lambda/4$ wave plates and $\lambda/2$ wave plates.

Each polarization element may be freely chosen, such as a single plate, achromatism for broadband wavelength, high-power compatibility, specification wavelength, phase difference specification, polarizer, etc. Various polarization conditions can be produced through 0.1-degree angle adjustments with a highly accurate rotation mechanism.

This product is recommended for a wide range of applications, such as optical communications, optical measurement, biotechnology, and other research institutions, etc.

Features

- Low insertion loss, low loss fluctuation; and high return loss
- Compatibility with a wide range of polarizing element variations
- Simple and flexible operation panels, angle specification, relative angles and constant speed rotation
- A wide variety of options and high functionality
- Capability to be manually operated and externally controlled

Key Applications

- PDL measurement in combination with optical power meters



Typical Specifications

Model	RPC05C		
Structure	P-Q-H	Q-H-Q	Q-H
Insertion Loss	≤ 0.9 dB	≤ 0.9 dB	≤ 0.8 dB
Loss Fluctuation	≤ 0.1 dB		
Return Loss	≥ 50 dB		
Wavelength	1550 nm, 1310 nm or Broadband		
Optical Fiber	SMF or DSF or PMF		
Optical Adapter	SC/FC Inter-Exchangeable Type Adapter		

Rating

External Control	USB
Power Source	AC 90-240 V
Power Consumption	≤ 30 [W]
Operating Temperature	10-45 [deg C]
Storage Temperature	0-60 [deg C]
Dimensions (W x H x D)	260 x 99 x 280 [mm]
Weight	5 [kg]

Ordering Instructions

+Motorized Polarization Controller

Order format: RPC05C- (1) - (2) / (3) [(1) / (4) / (1)(4) / (1)(4)]

1) Configuration example: **3-Stage Motorized Polarization Controller**

Order format example: RPC05C-15-D/S (15P/15Q/15H)

(Configuration: λ : 1550nm, Polarizer + $\lambda/4$ + $\lambda/2$, Fiber: DSF, Connector: SC/SPC,)

2) Configuration example: **2-Stage Motorized Polarization Controller**

Order format example: RPC05C-13-S/S (13Q/13H)

(Configuration: λ : 1310nm, $\lambda/4$ + $\lambda/2$, Fiber: SMF, Connector: SC/SPC,)

(1) Wavelength	15: 1550 nm 13: 1310 nm B: Broadband(1260-1620nm)*
(2) Optical Fiber	S: SMF D: DSF P: PMF
(3) Types of Polish	F: FC/SPC S: SC/SPC FA: FC/Angled PC SA: SC/Angled PC *When you chose the Angled PC, the adapter is the fixed type.
(4) Configuration	P: Polarizer Q: $\lambda/4$ Wave plate H: $\lambda/2$ Wave plate

*Broadband type (1260-1620nm) is option.