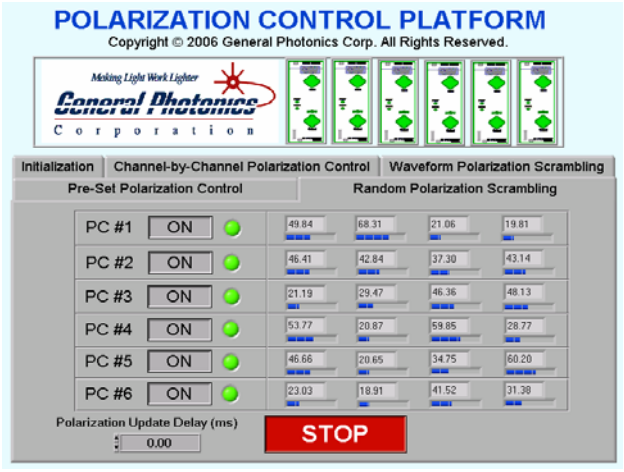
Multi-Channel Polarization Control Platform

MPC-601

The MPC-601 is an integrated platform that allows the user to control the polarization states of multiple optical channels simultaneously through a computer interface. The platform provides several functions: (i) channel-by-channel polarization control; (ii) Pre-set polarization control; (iii) polarization scrambling (random or waveform). This powerful tool can perform most common polarization control applications. Because the platform utilizes General Photonics' patented fiber-squeezer based dynamic polarization controllers (PolaRITE™ II/III), it also possesses their intrinsic advantages, including extremely low insertion loss, activation loss, PDL, PMD and back reflection. In addition, the polarization controllers' sub-millisecond response time enables extremely fast polarization control. The MPC-601 can thus facilitate various applications including PMD emulation and compensation, manipulating PMD/PDL effects and distributed or simultaneous polarization control. It is an invaluable tool in measurement environments.

Control Interface



Applications:

- Multiple channel polarization control
- PMD emulation and compensation
- Performance monitoring
- Distributed polarization control
- Measurement

Unique Features:

- Multiple functions
- Fast control speed
- Low-loss, Low PDL
- User-friendly control interface

Preliminary Specifications

Operating Wavelength Range	1260-1630 nm (standard), or 980-1360 nm
Insertion Loss	0.05 dB/channel excluding connector loss
Activation loss (insertion loss variation)	< 0.01 dB per channel
Polarization extinction ratio	> 40 dB
SOP change resolution	0.2° on Poincaré sphere
Retardation range per channel	> 4π
Polarization response time	< 50μs
PDL	< 0.01 dB
Number of optical channels	Up to six
Control speed	< 1 ms
Optical power handling	> 1000 mW
Operating Temperature	0 °C to 50 °C
Storage Temperature	-20 °C to 70 °C
Electrical Interface	Digital I/O, 12-bit resolution
Software	LabView program, laptop available
Power Supply	100 ~ 120 VAC, 50 ~ 60 Hz, or 200 ~ 240 VAC, 50 ~ 60 Hz
Dimensions	3U, 63HP, 360mm depth

Please specify power supply when ordering.

Ordering Information:

MPC – 601 – X – X – XXX

- Number of Channels: (1-6)
- Wavelength Range: 1 = 1260-1630nm, 2 = 980-1360nm
- Connector Type: FC/PC; FC/APC; SC/PC; SC/APC

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