

# UC INSTRUMENTS GM8015 Motorized Polarization Scrambler

Technical Specifications Ver 1.01  
May, 2010



 UC INSTRUMENTS CORP.

# GM8015 Motorized Polarization Scrambler

The UC INSTRUMENTS GM8015 Motorized Polarization Scrambler is a programmable motorized control polarization scrambler. Its polarization control capability enhances measurement speed, accuracy, and overall productivity. The continuous long optical fiber enables high power and ultra-low insertion loss. This design provides a wide range of AutoScan rates and high incremental angular resolution. Four fiber knob loop design has proven to permit excellent control with ultra-low power variations (leading to low PDL). This reliable design allows a wide range of applications from component testing to PMD related activities.

## Features

- Single-fiber design
- Ultra-low insertion loss, PDL, and back-reflection
- Convenient save/recall settings
- Multi-rate polarization scrambling
- AutoScan operation with a wide dynamic range of rotational speed
- RS232 interface
- Compact dimension
- Competitive price

## Applications

- Component level PDL measurements
- Sub-system PDL tests
- General purpose in-line control of the SOP
- Low to medium-speed polarization scrambler
- Polarization pattern generator
- Maximize or minimize signal intensity with feedback from optical power meters
- Component within PMD emulator
- Component within PMD compensator
- Polarization stabilizer

# Specifications

<b>Model #</b>	<b>GM8015</b>
<i>Principle</i>	<i>4 Motorized Fiber Knob Loop</i>
<i>Wavelength Range</i>	<i>850 ~ 1700 nm</i>
<i>Insertion Loss</i>	<i>&lt;= 0.5 dB</i>
<i>Extinction Loss</i>	<i>40 dB</i>
<i>PDL</i>	<i>&lt;= 0.008 dB *</i>
<i>Optical Connector</i>	<i>FC/UPC or FC/APC</i>
<i>Operating Temperature</i>	<i>0 ~ 40 ° C</i>
<i>Interface</i>	<i>RS232</i>
<i>Power</i>	<i>100 ~ 240 V AC</i>
<i>Operation Temperature</i>	<i>0 ~ +40 ° C</i>
<i>Storage Temperature</i>	<i>-30 ~ +80 ° C</i>
<i>Dimensions</i>	<i>200 mm H, 105 mm W, 320 mm D</i>
<i>Weight</i>	<i>4.5 kg</i>

# UC INSTRUMENTS' Test and Measurement Supports, Services and Assistance

UC INSTRUMENTS provides high performance, high value, low cost, affordable test and measurement instrument solutions for our customers. Our extensive support sources can help you choose right UC INSTRUMENTS' products for your specific applications and apply them successfully. Every instrument /system we sell has a global warranty. All of our instruments are with at least 12 months factory warranty.

## Our Promises

All of UC INSTRUMENTS' test and measurement instruments and systems meet their advertised performance and functionality. When you select a UC INSTRUMENTS' product, we can help your product operation with our decade experiences, and provide the basic measurement assistance for the use of special capabilities.

## Contact Information

### United States:

#### UC INSTRUMENTS CORP.

3652 Edison Way  
Fremont, CA 94538  
USA

Tel: 1-510-366-7353

Fax: 1-510-795-1795

[www.ucinstruments.com](http://www.ucinstruments.com)

Product specifications and descriptions in this documentation subject to change without notice.

Copyright © 2008 UC INSTRUMENTS CORP.

May, 2010

31000045 V1.01