# UC INSTRUMENTS GM8036 LASER SWEEP OPTICAL SPECTRUM ANALYZER (1525 ~ 1610 nm)

Technical Specifications v1.01 March, 2011





## GM8036 LASER SWEEP OPTICAL SPECTRUM ANALYZER (1525 ~ 1610 nm)

UC INSTRUMENTS' GM8036 laser sweep optical spectrum analyzer is a PC control spectrum analyze system for passive components tests. It provides high performance in testing CWDM/DWDM components, GFF, Interleaver, WSS, AWG & PLC components, optical amplifiers, DWDM systems, and performing other general-purpose fiber optical test and measurement applications. This system can be integrated with optical attenuator & power meter, leading to a high performance test system platform with high wavelength accuracy and rapid scan wavelength tunability.

Its PC-based flexible application test software can readily build up customer desirable testing templates and generate test reports. It is also an excellent testing platform for passive components processing alignment and monitor. Its fast sweep function can directly show optical spectrum of products on production lines. Build-in tunable laser source and power meter can function either independently serving as laser source and power meter or collaboratively performing sweep optical spectrum analysis function.

#### **Features**

Rapid wavelength scan
High wavelength accuracy
Fast startup
High laser power output
Integrated with power meter, PDL controller, return loss meter option

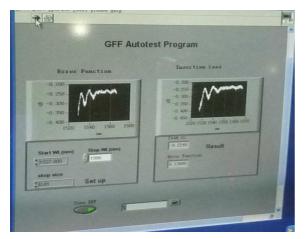
### **Applications**

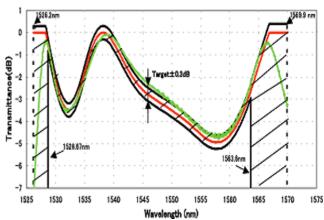
CWDM/DWDM, WSS, AWG, PLC, GFF and Interleaver critical components and modules testing
Fiber sensor tests
PMD and PDL measurements
Fiber optical, telecom R&D lab tests
Easy to be integrated into a passive fiber components testing system

### **Specifications**

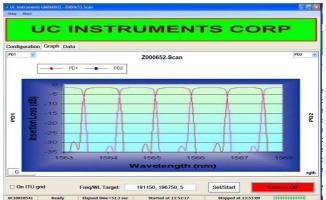
| Model #  | GM8036  |
|--|---|
| Tunable Laser Source                                       |   |
| Wavelength range   | 1525.00 to 1568.00 nm                             |
| Output Power   | >= 20 mW  |
| Wavelength resolution                                      | 1.0 pm  |
| Absolute wavelength accuracy                               | +/- 10 pm, tpy. < 5 pm                            |
| Relative wavelength accuracy                               | +/- 5 pm, Typ. +/- 2 pm                           |
| Wavelength repeatability                                   | +/- 3 pm, typ. +/- 1 pm                           |
| Wavelength stability (typ., 24 hrs at constant temperature | <= +/- 5 pm                                       |
| Tuning speed   | <= 2 ms per step                                  |
| Power stability  | < +/- 0.1 dB, 24 hours.                           |
| Power repeatability  | +/- 0.05 dB                                       |
| Power linearity  | +/- 0.3 dB  |
| Power flatness versus wavelength                           | 0.3 dB; typ., 0.05dB.                             |
| Side-mode Suppression ratio                                | >= 40 dBc   |
| Relative intensity noise(RIN. Typ.)                        | >= 40 dBc<br>< -135 dB                            |
| Relative intensity holse(Rin. Typ.)                        | < -135 db   |
| Power Meter  |   |
| Wavelength Range   | 850 nm to 1620 nm                                 |
| Power Measurement Range                                    | +13 dBm to -70 dBm                                |
| Power Accuracy   | < +/- 4%  |
| Power repeatability  | < 0.1 dB  |
| Sweep Function   |   |
| Sweep Mode   | Fast Continue Spectrum Sweep                      |
| Resolution   | 1 PM  |
| Accuracy   | 5 PM.   |
| Power Display  | Peak Power Display                                |
| Center Wavelength Function                                 | 3 dB Down Center Wavelength Display               |
| Reference Function   | Testing Reference Setup                           |
|  |   |
| Power Adaptor Power  | AC 100 - 240 V $\pm$ 10%, 48 - 66 Hz, 100 VA max. |
| Display  | PC Interface                                      |
| Environmental Temperature                                  | −40 ° C to +80 ° C                                |
| Storage Temperature  | 0 ° C to +45 ° C                                  |
| Operating Temperature                                      | <95% R.H. from 0 $^{\circ}$ C to +45 $^{\circ}$ C |
| Humidity   |   |
| Work Environment   | -10° C to +70° C                                  |
|  | 0° C to +45° C                                    |
|  | <95% R.H. from $0^{\circ}$ C to +45 $^{\circ}$ C  |
| Dimensions   | Standard 1U Rack                                  |
| Weight   | 10.0 lbs  |

### Gain Flattening Filter









**GFF, DWDM, Interleaver Test Spectrum** 

## **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

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