# UC INSTRUMENTS GM82009xx PC Control Tunable Laser Source Modules

Technical Specifications Ver 1.08 Jan., 2011





### **GM82009xx Tunable Laser Source Modules**

The GM82009C, GM82009L and GM82009CL tunable laser modules offer superior performance in testing DWDM components, AWG & PLC components, and optical amplifiers, and performing other general- purpose fiber optical test and measurement applications particularly in fiber grating sensor fast sweep testing.

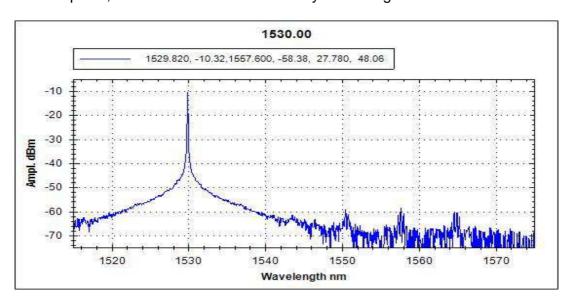
Each of the three tunable laser modules (i.e., GM82009C, GM82009L, GM82009CL) can be connected to a PC through a USB cable, comprising a high accuracy, high power, compact dimension, fast startup, affordable tunable laser source system. This system provides C band, L band, or C+L band tunable laser sources options. These modules can be integrated into customers' products system with RS232 interface control and output trig BNC port. UC Instruments also provide modules control software.

#### **Features**

High wavelength accuracy
Continuous wavelength tunability
High power laser source
Rapid tuning speed
Fast startup
Compact size
Competitive price

### **Applications**

WDM, GFF, isolator, AWG, PLC components tests Fiber sensor fast sweep tests Fiber sensor/sensor array developments PMD and PDL measurements Fiber optical, telecom R&D lab tests and system integration



### **Specifications**

Model #	GM82009C	GM82009L	GM82009CL
Wavelength range	1525.00 to 1568.00 nm	1568.00 to 1610.00 nm	1525.00 to 1610.00 nm
Output Power	>= 13 dBm	>= 10 dBm	>= 7 dBm
Wavelength resolution	1.0 pm		
Absolute wavelength accuracy	+/- 10 pm, typ < 5 pm		
Relative wavelength accuracy	+/- 5 pm, Typ. +/- 2 pm		
Wavelength repeatability	+/- 2 pm, typ. +/- 1 pm		
Wavelength stability (typ., 24 hrs at constant temperature	<= +/- 2 pm		
Tuning speed	<= 2 ms per step		
Power stability	+/- 0.05 dB, 1 hour. Typ., +/- 0.1 dB, 24 hours.		
Power repeatability	+/- 0.05 dB		
Power linearity	+/- 0.3 dB		
Power flatness versus wavelength	0.3 dB typ., 0.5 dB max.		
Side-mode Suppression ratio	>= 45 dBc		
Relative intensity noise (RIN. Typ.)	< -135 dB		
Output optical interface	PM, FC/PC connector		
Interface	USB or RS232(Optional)		
Output trig port	BNC trig		
Power	3.3 V; 3 A		
Dimensions	40 mm H, 150 mm W, 170 mm D		
Weight	0.5 kg		

## **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**

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June, 2008

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