## UC INSTRUMENTS GM8042 Desktop Tunable Laser Source

Technical Specifications Ver 1.06 Nov, 2010





# **GM8042** Desktop Tunable Laser Source

The GM8042 desktop tunable laser sources offer superior performance in testing DWDM components, AWG & PLC components, optical amplifiers, DWDM system and performing other general-purpose fiber optical test and measurement applications. It is a high wavelength accuracy, high power output, compact dimensions, fast startup, and affordable tunable laser source system. UC INSTRUMENTS provides C band, L band, or C+L band tunable laser sources options.

#### Features

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

#### Applications

Field WDM, GFF, AWG, PLC and ATM system engineering in situ trouble shooting Fiber sensor/sensor array tests PMD and PDL measurements Fiber optical, telecom R&D lab tests Compact field testing system

#### Specifications

Model	GM8042C	GM8042L	GM8042CL
Wavelength range	1525.00 to 1568.00 nm	1568.00 to 1610.00 nm	1525.00 to 1610.00 nm
Output Power	>= 20 mW	>= 10 mW	>= 5.0 mW
Power Adjust Range	25 dB	25 dB	25 dB
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	<= 0.02 s 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., 0.5 dB max.		
Side-mode Suppression ratio	>= 40 dBc		
Relative intensity noise (RIN. Typ.)	< -135 dB		
Power	AC 100 - 240 V $\pm$ 10%, 48 - 66 Hz, 100 VA max.		
Environmental temperature	-40 ° C to +80 ° C		
Storage temperature	$0^{\circ}$ C to +45 $^{\circ}$ C		
Operating temperature Humidity	<95% R.H. from 0 ° C to +45 ° C		
Working Environment	$-10^{\circ}$ C to $+70^{\circ}$ C		
	0° C to +45° C		
	<95% R.H. from 0° C to +45° C		
Dimensions	200x 105 x 250 mm		
Weight	9.0 lbs		

# 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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