

# UC INSTRUMENTS GM8042 Desktop Tunable Laser Source

Technical Specifications Ver 1.00  
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# GM8042 Desktop Tunable Laser Source

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

## Features

- High wavelength accuracy
- Quick startup
- High power output
- Internal Integrated Optical Attenuator

## Applications

- Field WDM, GFF, AWG, PLC, and ATM system engineering trouble shoot
- Fiber sensors test
- PMD and PDL measurement
- Fiber optical , Telcom R & D lab test
- Impact field testing system

## Specifications

The UC INSTRUMENTS GM8042 Series Desktop Tunable Laser Source's Specification as below:

<b>Model #</b>	<b>GM8042C</b>	<b>GM8042L</b>	<b>GM8042CL</b>
<b>Tunable Laser Source</b>			
<i>Wavelength range</i>	<b>1525.00 to 1568.00 nm</b>	<b>1568.00 to 1610.00 nm</b>	<b>1525.00 to 1610.00 nm</b>
<i>Output Power</i>	<b>&gt;= 20 mW</b>	<b>&gt;= 10 mW</b>	<b>&gt;= 5.0 mW</b>
<i>Power Adjust Range</i>	<b>25 dB</b>	<b>25 dB</b>	<b>25 dB</b>
<i>Wavelength resolution</i>	<b>1.0 pm</b>		
<i>Absolute wavelength accuracy</i>	<b>+/- 10 pm, tpy. &lt; 5 pm</b>		
<i>Relative wavelength accuracy</i>	<b>+/- 5 pm, Typ. +/- 2 pm</b>		
<i>Wavelength repeatability</i>	<b>+/- 2 pm, typ. +/- 1 pm</b>		
<i>Wavelength stability (typ., 24 hrs at constant temperature)</i>	<b>&lt;= +/- 2 pm</b>		
<i>Tuning speed</i>	<b>&lt;= 0.02 s per step</b>		
<i>Power stability</i>	<b>&lt; +/- 0.1 dB, 24 hours.</b>		
<i>Power repeatability</i>	<b>+/- 0.05 dB</b>		
<i>Power linearity</i>	<b>+/- 0.3 dB</b>		
<i>Power fiatness versus wavelength</i>	<b>0.3 dB typ., 0.5 dB max.</b>		
<i>Side-mode Suppression ritio</i>	<b>&gt;= 40 dBc</b>		
<i>Relative intensity noise(RIN. Typ.)</i>	<b>&lt; -135 dB</b>		
<i>Power</i>	<b>AC 100 - 240 V <math>\pm</math> 10%, 48 - 66 Hz, 100 VA max.</b>		
<i>Environmental</i>	<b>-40° C to +80° C</b>		
<i>Storage temperature</i>	<b>0° C to +45° C</b>		
<i>Operating temperature</i>	<b>&lt;95% R.H. from 0° C to +45° C</b>		
<i>Humidity</i>	<b>&lt;95% R.H. from 0° C to +45° C</b>		
<i>Work Environmental</i>	<b>-10° C to +70° C</b>		
	<b>0° C to +45° C</b>		
	<b>&lt;95% R.H. from 0° C to +45° C</b>		
<i>Dimensions</i>	<b>256 x 169 x 64 mm</b>		
<i>Weight</i>	<b>9.0 lbs</b>		

# **UC INSTRUMENTS' Test and Measurement Support, Services and Assistance**

UC INSTRUMENTS provides high performance, high value, low cost, affordable test and measurement instruments solution for our customers. Our extensive support sources can help you choose right UC INSTRUMENTS' products for your application and apply them successfully. Every instruments and system we sell a global warranty. All of our instruments with at least 18 months factory warranty.

## **Our Promise**

All of UC INSTRUMENTS' test and measurement instruments and system will met its advertised performance and functionality. When you select UC INSTRUMENTS' products, we can verify if it is work properly, help with products operation, and provides the basic measurement assistance for the use of special capabilities.

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