

# UC INSTRUMENTS GM81014 + GM8300X Optical Head Modules

**Technical Specifications Ver 1.04**  
**May, 2010**



# GM81014 + GM8300X Optical Head Modules

The GM81014 + GM83001E and GM81014 + GM83002 optical head modules offer superior performance for the test of DWDM components, AWG & PLC components, optical amplifiers, and other general purpose of fiber optical test and measurement applications.

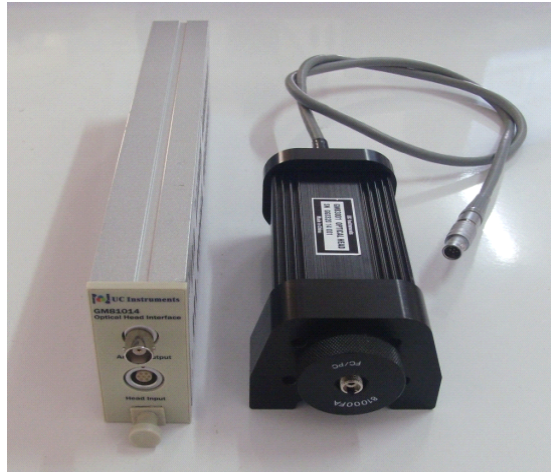
A GM8001 mainframe can host 2 of each GM81014 + GM83001E, or GM81014 + GM83002 optical head modules. It becomes a High Performance, Small Dimension, Fast Startup, Affordable Optical Power Meter test system. It provides low power, high power, single channel and dual channel optical power meter modules options. UC Instruments also can provide high channel count solution up to 16 channels.

## Features

- High performance
- Quick startup
- Difference power range and difference channel number available
- Small dimension
- Affordable price

## Applications

- WDM, GFF, AWG, PLC components test
- Fiber Sensor test
- PMD and PDL measurement
- Fiber Optical, Telcom R & D lab test



## Specifications

<b>Model #</b>	<b>GM81014 + GM83001E</b>	<b>GM81016 + GM83001E</b>
<i>Sensor Element</i>	<b>Single Channel InGaAs</b>	<b>Dual Channel InGaAs</b>
<i>Wavelength Range</i>	850 ~ 1700 nm	
<i>Power Range</i>	+ 3 ~ -85 dBm	
<i>Application Fiber Type</i>	Standard SM and MM up to 62.5 $\mu$ m core size	
<i>Uncertainty (accuracy) at reference condition</i>	+/- 4% (1200 nm ~ 1610 nm)	
<i>Relative Uncertainty (accuracy) at reference condition</i>	< 0.02 dB Typical	
<i>Linearity (power)</i>	<= +/- 0.06 dB (1200 nm ~ 1610 nm, + 0 ~ -60 dBm)	
<i>Return Loss</i>	> 40 dB	
<i>Operation Temperature</i>	0 ~ +40°C	
<i>Storage Temperature</i>	-30 ~ +80°C	
<i>Recalibration Period</i>	2 years	
<i>Dimensions</i>	75 mm H, 32 mm W, 310 mm D (GM81014) 63mm H, 43 mm W, 150 mm D (GM83001E)	
<i>Weight</i>	0.5 kg	

<b>Model #</b>	<b>GM81014 + GM83002</b>	<b>GM81016 + GM83002</b>
<i>Sensor Element</i>	<b>Single Channel InGaAs</b>	<b>Dual Channel InGaAs</b>
<i>Wavelength Range</i>	850 ~ 1700 nm	
<i>Power Range</i>	+ 23 ~ -60 dBm	
<i>Application Fiber Type</i>	Standard SM and MM up to 62.5 $\mu$ m core size	
<i>Uncertainty (accuracy) at reference condition</i>	+/- 4% (1200 nm ~ 1610 nm)	

<i>Relative Uncertainty (accuracy) at reference condition</i>	<i>&lt; 0.02 dB Typical</i>
<i>Linearity (power)</i>	<i>&lt;= +/- 0.06 dB (1200 nm ~ 1610 nm, +20 ~ -40 dBm)</i>
<i>Return Loss</i>	<i>&gt; 40 dB</i>
<i>Operation Temperature</i>	<i>0 ~ +40°C</i>
<i>Storage Temperature</i>	<i>-30 ~ +80°C</i>
<i>Recalibration Period</i>	<i>2 years</i>
<i>Dimensions</i>	<i>75 mm H, 32 mm W, 310 mm D (GM81014) 63mm H, 43 mm W, 150 mm D (GM83001E)</i>
<i>Weight</i>	<i>0.5 kg</i>

Customers can contact with UC INSTRUMENTS customers services to get detail GM8001 Lightwave Multimeter specification.

## 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 12 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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