



6334

# Optical Power Meter



**China Electronics Technology Instruments Co., Ltd.**

## Product Summaries

6334 optical power meter is a powerful optical measuring instrument of high intelligence、 high precision、 high sensitivity. It can perform optical power measure with high accuracy and wide dynamic-range, optical loss and optical stability measure with high resolution. It provides GPIB and RS232 interface ports, can constitute an automatic test system.

6334 optical power meter is widely applied in all optical power measurements such as optical fiber loss measurement and optical device performance evaluation.it have the characteristics such as wide measuring range、 high accuracy、 high performance-cost rate、 high dependability and easy operation etc.

6334 optical power meter is available in various configurations for the best possible match to the most common applications. It is a series divided into the five kinds including 6334A、 6334B、 6334C、 6334D、 6334E.

## Mainly features:

- Zero function
- Auto-range、 Hold-range、 Manual-range function
- Compensating wavelength response function
- Data storage、 recall、 output function
- Light division ratio and light division loss test function (only for 6334B、 6334C)
- Parameter setting function
- Application function
- GPIB and RS232 interface function

### ● Zero function

6334 offers zero function. The function is for eliminating the equivalent power that the dark current and noise of the light detector produce. Measuring faint optical power (absolute optical power is less than  $-50\text{dBm}$ ), the instrument should be zeroed. Zero must be in the condition of keeping out the light. It is helpful to improve the measure accuracy.

### ● Auto-range、 Hold-range、 Manual-range function

6334 offers auto-range、 hold-range、 manual-range function. According to light power variety scope and variety speed, you can adopt the different range mode. For example, if the variety scope of the input light power lack 10 dB, you can consumedly increase the measure speed by selecting the hold-range function, because of it can save consumed time of range switch in auto-range mode.

### ● Compensating wavelength response function

In order to measure the power in the whole wave-band, 6334 offers an embedded compensating curve agree with the detector's wavelength response. Moreover, according to the customer's special

request, 6334 offers the accurate calibration at some special wavelength.

● **Data storage, recall, output function**

6334 offers data storage, recall, output function. It is convenient to handle these measure data in the evening period.

● **Light division ratio and light division loss test function**

6334B、6334C specially offers light division ratio and light division loss test function, and very much suits to monitor the power division and loss in the process to manufacture the optical passive device (optical coupler etc).

● **Parameter setting function**

6334 offers parameter setting function, such as  $\lambda$ (the customer definition wavelength)、REF(reference power)、CAL(customer calibration factor)、GPIB(GPIB address)、CPLR(light division ratio)、CLOCK(system clock),etc. You can set these parameters according to the demands.

● **Application function**

6334 specially offers application function, such as extremum MAX(maximum positive deviation)、MIN(minimum negative deviation)、DIF(the difference between MAX and MIN),can be used to measure the stability of the optical power.

● **GPIB and RS232 interface function**

6334 offers the GPIB and RS232 interface. From the RS232 interface, It can output the real-time measure result. With the GPIB interface, It can constitute the automatic test system with other GPIB equipment and PC.

## Typical application

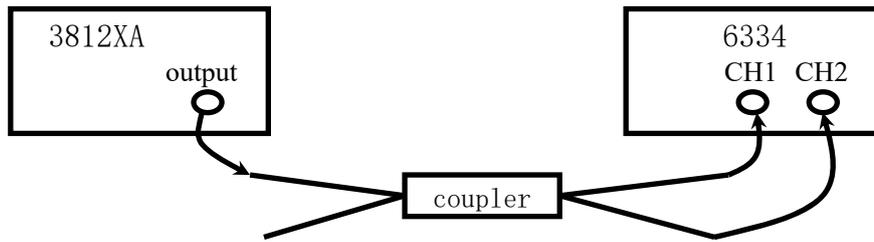
Typical application 1: Measure the size and stability of the light source's output optical power with 6334.



Connect the output port of the light source and the input port of the optical power meter with fiber, power on and preheat the instrument, set operation wavelength of the power meter corresponding to light source's center wavelength, the measure value is the size of the light source's output power.

According to the test request, choose and run a function from the MAX、MIN、DIF test functions, at the same time, the system clock start to time for zero.6334 can automatically execute measure and record the value in the limited time, when the test stop, the measure value is the stability of the light source's output optical power.

Typical application 2: Measure the light division ratio of the optical coupler with 6334.



Connect the output port of the light source and the input port of the optical coupler with fiber, connect the two output ports of the optical coupler and the two input ports of the optical power meter(6334B or 6334C) respectively with fiber, press the “mode ” key, the instrument goes into the coupling ratio measure mode, the measure value is the light division ratio and total light division loss.The special function very much suit to monitor the power division and loss in the process to manufacture the optical passive device (optical coupler etc).

## Specifications

Parameter	6334A		6334B		6334C		6334D	6334E
	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH1
Wavelength Range <sup>*1</sup> (nm)	1000~1650	400~999	800~1650		400~1100		800~1650	400~1100
Sensor Type	InGaAs	Si	InGaAs		Si		InGaAs	Si
Power Range (dBm)	+10~-80							
Power Accuracy <sup>*2</sup> (dB) (-25.00dBm)	±0.2							
Power Accuracy <sup>*3</sup> (+10~-80dBm)	±0.5dB±50pW							
Channel Consistency <sup>*4</sup> (dB) (-25.00dBm)	/		± 0.1		/		/	
Data Output Rate <sup>*5</sup>	≥ 2/sec.channel							
Optical Interface type	Standard: FC; Option: SC、ST、UI							
Dimensions	D×W×H=251×213×88(mm)							
Weight	Approx. 2.5kg							
Power Supply	AC220V±10%,50Hz±5%							
Note 1: Calibrated Wavelength 850nm、1310nm、1550nm。 Note 2: On day of calibration,T=23°C±5°C, at constant temperature, FC Adapter ,continuous wave。 Note 3: T=0°C~40°C, at constant temperature, FC Adapter ,continuous wave。 Note 4: On day of calibration,T=23°C±5°C, at constant temperature, FC Adapter ,continuous wave。 Note 5: RS232 Output。								

## Ordering information

- Main frame  
6334A Optical Power Meter  
6334B Optical Power Meter  
6334C Optical Power Meter  
6334D Optical Power Meter  
6334E Optical Power Meter

- Standard accessories

NO.	Name	quantity
1	FC adapter <sup>*1</sup>	1
2	Three-wire Power Cord	1
3	User manual	1

Note 1: Configure according to the actual channel number.

- Options

NO.	Name	type	note
1	SC adapter		oneself replacese
2	ST adapter		oneself replacese
3	UI adapter		oneself replacese

**Ceyear**

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