

激光功率计说明书



感谢您购买吉林省永利激光科技有限公司的产品，请在使用前仔细阅读使用说明并妥善保管。

本使用说明并非质量保证书，对印刷错误的更正，以及产品的改进，均由吉林省永利激光科技有限公司做出解释，修正内容将编入再版使用安装说明书中，恕不预先通知。

一. 概述

激光功率计采用了量热吸收测量原理，热敏探头可接受的光谱宽度和功率范围都非常宽，空间均匀性也非常高，受光斑尺寸、光点位置或光斑不均匀性的影响较小。既可以测量连续激光输出功率，也可以测量重复频率脉冲激光输出的平均功率。

二. 技术参数

名称：激光功率计
型号：YL-S-3
量程：0-200W
显示：三位半 LED 显示
最小分辨率：0.1W
光敏面积：Φ28mm
光谱范围：8-11μm
校准波长：10.6μm
响应时间：≤5S
冷却方式：水冷
应用范围：CO₂激光器
非线性：±5%
接受面响应度不均匀性：±5%。
消耗功率：≤8W
电源要求：AC 220V±10%，50Hz

三. 使用方法

1. 打开包装箱后请检查配件是否齐全。配件包括：探头，底座，显示箱，电源线及产品说明书。
2. 接上信号线及电源线，打开显示箱上电源开关。
3. 功率计探头通冷却水。
4. 根据被测试对象的功率大小，通过开关进行选择合适量程。
5. 将 CO₂激光器激光输出端垂直对准功率计接收探头中心点进行功率测量。
6. 测试完毕关闭电源。

四. 注意事项

1. 轻拿轻放，防止探头中精密元件因震动脱落或损坏。
2. 功率计底座应水平放置。
3. 功率计工作时必须通水冷却，长时间测试较大功率时应注意水温。
4. 检查或拆装时一定要先切断电源。
5. 长时间不用请将电源线及信号线拔掉。
6. 如有问题请联系厂家，严禁私自拆卸。

五. 售后服务

本产品免费保修一年，终身维修。

下列情况不属于免费保修对象；

1. 超过保修期的；
2. 安装使用不当而引起故障；
3. 因不可抗力和人为造成损坏的；
4. 用户自行拆卸改造修理而引起的故障及损坏。

Laser power meter specifications

Thank you for purchasing products Jilin Yongli laser technology co., LTD., please read the instructions carefully before use and safekeeping. This instruction manual is not a guarantee of quality, the correction of typographical errors, and product improvements, are explained by Jilin Wynn laser technology co., LTD., modified content will be codified in the reprint with installation instructions, no prior notice.

I. Outline

Laser Power Meter using the amount of heat absorption measurement principle, thermal sensor measure the scope is very wide in spectral width and power, very high spatial uniformity, without spot size, spot location or spot uneven impact. Can measure continuous wave laser output power; pulse repetition rate can also measure the average laser output power.

II. Technical parameters

- 1 Name: Laser Power Meter
- 2 Model: YL-S-3
- 3 Range: 0-200W
- 4 Display: LED display
- 5 Minimum Resolution: 0.1W
- 6 Photosensitive area: ϕ 28mm
- 7 Spectral range: 8-11um
- 8 Calibration Wavelength: 10.6um
- 9 Response time: $\leq 5S$
- 10 Cooling: Water-cooled
- 11 Applications: CO2 laser
- 12 Nonlinearity: $\pm 5\%$
13. Accept the surface response nonuniformity: $\pm 5\%$
14. Consumption Power: $\leq 8W$
15. Power Requirements: AC 220V $\pm 10\%$, 50Hz

III. Usage

Please check whether the part is complete after open the package. Accessories include: probe, base, display box, power cord, and product specifications.

2. Connecting signal lines and power cord open the display box on the power switch.
3. Power meter probe on cooling water, please.
4. According to the power of the test object, choose appropriate range through the switch.
5. The laser output should be vertical alignment probe center of power meter, and do power measurement.
6. Turn off the power supply when test is finished.

IV. Notices

1. Handle with care; prevent precision components for loss or damage.
2. Pedestal of Power meter should be placed.
3. Power meter should be connected cooling water when working, long time testing, and pay attention to the temperature of water
4. Inspection or disassembling must cut off power supply firstly.
5. Long time no use, please pull out the power cord and signal lines.
6. If there are any problems please contact the manufacturer, it is strictly prohibited to disassemble.

V. After sales service

This product free warranty for one year, lifelong maintenance.

The following circumstance does not belong to free warranty object;

1. More than warranty period
2. Caused by improper installation failure;
3. Due to force majeure and man-made damage
4. Users to remove, repair caused by the transformation of the fault and damage.