

## VTS-200 VCSEL光电测试分析系统 VTS-200 VCSEL photoelectric test and analysis system

- VTS-200 VCSEL光电测量分析系统综合评价VCSEL器件的各项光电性能,测试速度快、精度高、稳定度好,软件功能强大,可实现以下参数的测量:

The VTS-200 VCSEL photoelectric measurement and analysis system comprehensively evaluates the photoelectric performance of VCSEL devices. It has fast testing speed, high accuracy, good stability, and powerful software functions, which can measure the following parameters:

- 电压、电流、电功率、光功率、光电转换效率

Voltage, current, electric power, optical power, photoelectric conversion efficiency

- 光谱功率分布曲线、峰值波长、半峰宽、中心波长等

Spectral power distribution curve, peak wavelength, half peak width, central wavelength, etc

- 辐射功率、辐射效率

Radiation power, radiation efficiency

- LIV曲线、辐射-温度特性曲线

LIV curve, radiation temperature characteristic curve

- 阈值电流

Threshold current

- PD电流

PD current

- 微分电阻、斜率效率

Differential resistance, slope efficiency



**技术参数 Specifications**

- 光谱范围：800-1000nm;  
Spectrum range: 800-1000nm;
- 半峰带宽：0.2nm;  
Half peak bandwidth: 0.2 nm;
- 波长准确度：0.05nm;  
Wavelength accuracy: 0.05nm;
- 温控夹具控温方式：TEC自动控温，精度0.1℃（选配项）；  
Temperature control mode of temperature control fixture: TEC automatic temperature control, accuracy 0.1 °C (optional);
- 可实现PD电流测量（选配项）；  
PD current measurement can be realized (optional);
- 配us级和ns级脉冲电源（根据客户要求）  
Equipped with us and ns level pulse power supply (according to customer requirements)
- 1) VCSEL测量专用us脉冲电源  
1) Special us pulse power supply for VCSEL measurement  
可实现程控脉冲输出，脉冲宽度、占空比均可调；  
Programmable pulse output, adjustable pulse width and duty cycle;  
脉冲宽度：100  $\mu$ s~30ms;  
Pulse width: 100  $\mu$  s~30ms;  
占空比：1%~10%;  
Duty cycle: 1%~10%;  
脉冲恒流测量范围：0~5A;  
Pulse constant current measurement range: 0~5A;  
脉冲电压测量范围：0~5V;  
Pulse voltage measurement range: 0~5V;  
最大输出能力：5A/5V;  
Maximum output capacity: 5A/5V;  
电压电流测量准确度：0.2%读数+0.1%量程  
Measurement accuracy of voltage and current: 0.2% reading+0.1% measuring range
- 2) VCSEL测量专用ns脉冲电源（选配）  
2) Ns pulse power supply for VCSEL measurement (optional)  
最小脉宽：1ns;  
Minimum pulse width: 1ns;  
峰值电流：15A;  
Peak current: 15A;  
重复频率：100MHz  
Repetition frequency: 100MHz