

## High-Resolution Spectrometer (200-1100 nm)

### L-series

SIMTRUM compact linear array fiber optic spectrometer adopts the Hamamatsu CMOS detector, Performance meets industrial and entry-level scientific applications. it has a small size, high sensitivity, high resolution, easy to use.

### Features

- Small size and low cost
- Support GPIO
- High sensitivity, high UV response
- No additional power supply is required
- Batch Consistency Control
- Various communication interfaces, support USB, serial port
- Low-temperature drift, wide operating temperature range: -20~60°C



### Technical Advantages

#### 1. High UV response and good signal-to-noise ratio

L series spectrometer adopts Hamamatsu CMOS detector, which has a better response in the ultraviolet band, and the signal-to-noise ratio can reach more than 500:1, which is more than 2 times minimum integration time is as low as 22.5us, which greatly expands the measurable dynamic range, especially for applications with strong light intensity and large changes.

#### 2. Powerful PC software

PC software provided with the spectrometer: FLAVOR is powerful software. In addition to the basic spectrum acquisition control functions, it also has functions such as saturation and automatic adjustment of the integration time, recording of the real integration time, and automatic peak finding. At the same time, the software also includes characteristic functions such as wavelet smoothing with patented technology. SDK supports Windows, Android, and Linux operating systems, and can provide secondary development packages in C#, C++, Java, Python, and other languages.

#### 3. High stability

0~40°C, the spectral resolution remains unchanged, which is the best choice for industrial applications.

#### 4. Simple to use

No configuration, preheating, plug and play

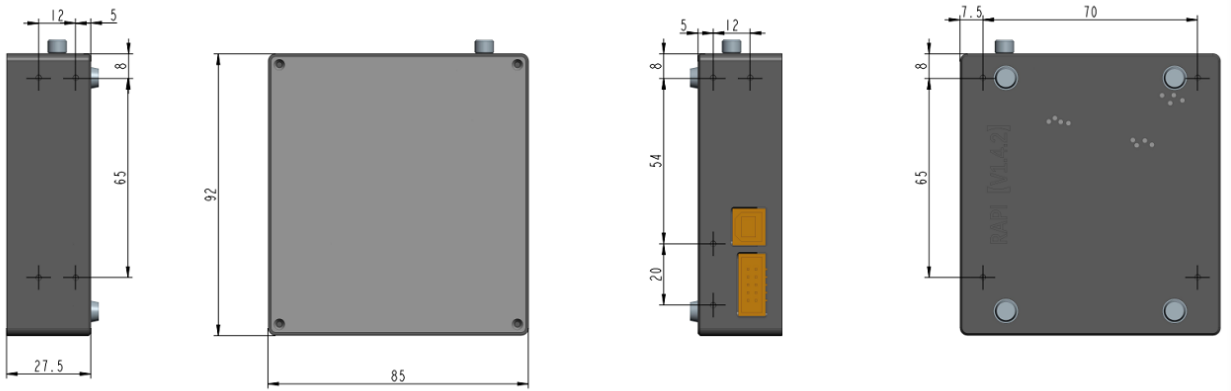
## Product Specifications\*

Model	Wavelength Range	Grating Scribe / Blaze Wavelength	Slit Width				
			10 um	25 um	50 um	100 um	200 um
L/200-1000	200-1000nm	600/200nm or 600/300nm	0.7nm	0.8nm	1.2nm	2.4nm	4.8nm
L/300-1100	300-1100nm	600/200nm or 600/300nm	0.7nm	0.8nm	1.2nm	2.4nm	4.8nm
L/300-800	300-800nm	900 /500nm	0.4nm	0.5nm	0.7nm	1.3nm	2.6nm
L/400-880	400-880nm	900 /500nm	0.4nm	0.5nm	0.7nm	1.3nm	2.6nm
L/500-960	500-950nm	900 /500nm	0.4nm	0.5nm	0.7nm	1.3nm	2.6nm
L/600-1040	600-1040nm	900 /500nm	0.4nm	0.5nm	0.7nm	1.3nm	2.6nm
L/180-550	180-550nm	1200/250nm or 1200/500nm	0.3nm	0.36nm	0.6nm	1nm	2nm
L/300-650	300-650nm	1200/250nm or 1200/500nm	0.3nm	0.36nm	0.6nm	1nm	2nm
L/400-740	400-740nm	1200/250nm or 1200/500nm	0.3nm	0.36nm	0.6nm	1nm	2nm
L/500-820	500-820nm	1200/250nm or 1200/500nm	0.3nm	0.36nm	0.6nm	1nm	2nm
L/600-900	600-900nm	1200/250nm or 1200/500nm	0.3nm	0.36nm	0.6nm	1nm	2nm
L/700-985	700-985nm	1200 / 850nm	0.25nm	0.38nm	0.55nm	1nm	2nm
L/780-1060	780-1060nm	1200 /850nm	0.25nm	0.38nm	0.55nm	1nm	2nm
L/800-1060	800-1060nm	1200 /850nm	0.25nm	0.38nm	0.55nm	1nm	2nm
L/200-440	200-440nm	1800/200nm or 1800/500nm	0.15nm	0.2nm	0.3nm	0.6nm	1.2nm
L/420-620	420-620nm	1800/200nm or 1800/500nm	0.15nm	0.2nm	0.3nm	0.6nm	1.2nm
L/500-700	500-700nm	1800/200nm or 1800/500nm	0.15nm	0.2nm	0.3nm	0.6nm	1.2nm
L/600-780	600-780nm	1800/200nm or 1800/500nm	0.15nm	0.2nm	0.3nm	0.6nm	1.2nm
L/700-840	700-840nm	1800/200nm or 1800/500nm	0.15nm	0.2nm	0.3nm	0.6nm	1.2nm
L/840-950	840-950nm	1800/200nm or 1800/500nm	0.15nm	0.2nm	0.3nm	0.6nm	1.2nm

## Product Parameters

<b>Size</b>	92*85*27.5mm <sup>3</sup>
<b>Weight</b>	107g
<b>Slit</b>	10um , 25um , 50um , 100um , 200um optional
<b>Fiber Holder</b>	SMA905 or FC/PC optional
<b>Resolution</b>	0.1nm FWHM or above
<b>Signal to Noise Ratio</b>	500:1
<b>Integration Time</b>	22.5uS ~ 120S

## Product Size

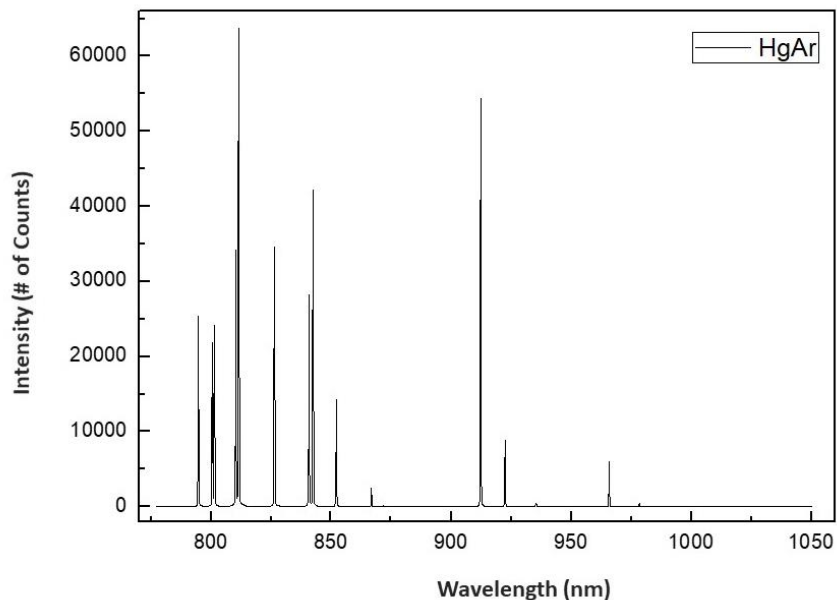


## Applications

- LED testing
- Fruit sorting
- Ground Spectrometer
- Handheld/Portable Raman Spectrometer
- Handheld/Portable Laser-induced breakdown spectroscopy (LIBS)
- Handheld/Portable Fluorescence Spectrometer

## Configuration Example

- 781.56 ~ 1058.26 nm / Slit 25  $\mu\text{m}$  / FWHM 0.27 nm @912 nm



\*Due to ongoing continuous product improvement, specifications are subject to change without notice.