VS140  Low Cost  Linear Array Spectrometers

In the lab, in the field, or on the shop floor you will collect the highest quality spectra possible with one of the new small, portable, and rugged VS 140 series linear array spectrometers. VS 140s have the largest aperture in their class, and are the only compact spectrometers available with a choice of either a linear CCD or high-dynamic-range PDA array detector. And, they come standard with Lynear software featuring on-the-fly data treatment and automated time stamped data acquisition for unattended and process monitoring applications.

- High Througput: \( f/2.4 \)
- High Sensitivity \textit{CCD} or \textit{PDA}  
- True \textit{USB 2.0} Plug & Play Interface
- External Trigger

\textbf{Lynear} software included
- On-the-fly data treatment
- Real-time export to Excel®
- Automated acquisition functions

The perfect proof-of-concept spectrometer for product design and process monitoring applications

\textbf{100% Satisfaction Guarantee}  
\textbf{30 Day}  
\textbf{Call For Details}
VS 140 Specifications:

- **Focal Length:** 140 mm
- **Aperture:** f/2.4
- **Stray light:** 2.5e-4
- **Acquisition Time:** 10 ms to 65s
- **Input:** fiber with SMA connector
- **Detectors:**
  - Linear CCD 3864 pixels
  - 8 µm x 200 µm
  - Photo Diode Array 1024 pixels
  - 25 µm x 500 µm pixels
- **Communications:** True USB 2.0
- **Software:**
  - Lynear included
  - SynerJY optional
  - SDK optional
- **Power:**
  - CCD: USB 2.0
  - PDA: 7.5 VDC
- **Size (LHHD):**
  - 7.0 in x 4.73 in x 2.25 in
  - 178 mm x 123 mm x 58 mm
- **Weight:** 1.5 lbs / 0.6 kg

**Lynear Software**

- Real-time
  - %T, AU, Spectral - +, log
- Real-time data smoothing
- Real-time data transfer to Excel
- Automated acquisition with time stamped file names
- External triggering
- Polynomial fit wavelength linearization
- User notes with automated acquisition parameters insertion

The VS series of spectrometers are also available in OEM configurations. Contact the HORIBA Jobin Yvon OEM department to discuss optical and packaging modifications for multi-unit purchases.

### Standard Versions

<table>
<thead>
<tr>
<th>Version</th>
<th>Spectral Range (nm)</th>
<th>Blaze Wavelength (nm)</th>
<th>Dispersion (nm/mm)</th>
<th>Typical resolution with a 100 µm core fiber (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV-VIS</td>
<td>190 - 800</td>
<td>250</td>
<td>24.2</td>
<td>2.3</td>
</tr>
<tr>
<td>VIS</td>
<td>380 - 780</td>
<td>450</td>
<td>16.7</td>
<td>1.4</td>
</tr>
<tr>
<td>VIS-NIR</td>
<td>400 - 1100</td>
<td></td>
<td>30.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.