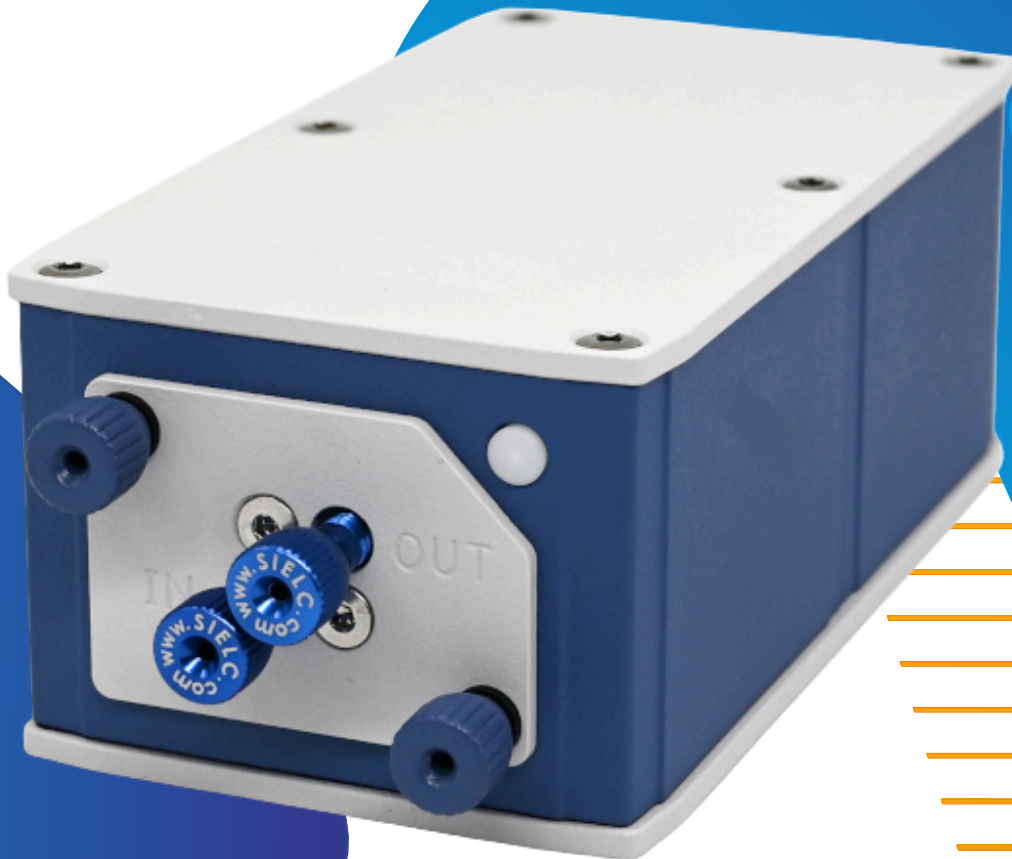


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**ALLTESTA™
MINI-DETECTOR**

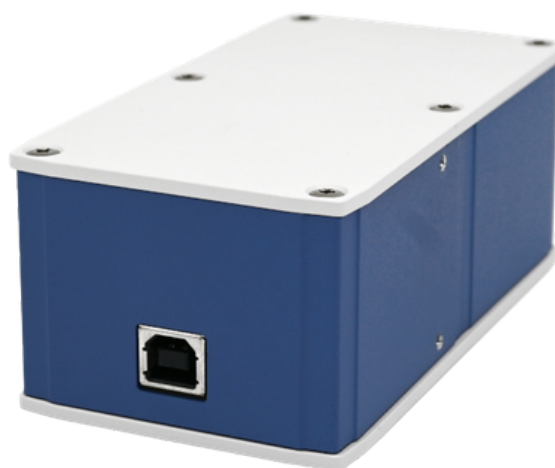
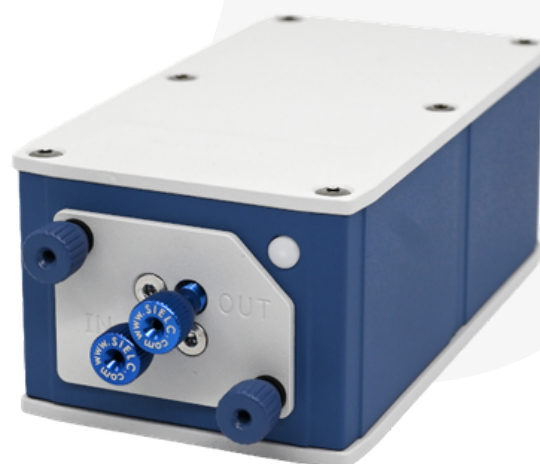
ALLTESTA™ MINI-DETECTOR

Introduction

The Alltesta™ Mini UV-Vis Detector is a compact multi-wavelength UV-Vis detector that combines high performance with seamless integration into analytical systems. It provides reliable real-time monitoring of the optical properties of flowing liquids for both research and routine analytical applications. The detector simultaneously delivering monitors four wavelengths, continuous high-speed data acquisition.

Its low-volume optical flow cell minimizes sample dispersion and helps maintain chromatographic performance, even at low flow rates.

With its small footprint, USB-powered operation, zero warm-up time, and customizable wavelength configuration, the Alltesta™ Mini UV-Vis Detector is a versatile solution for laboratories, instrument developers, and OEM manufacturers.



Standard Wavelengths

By default, the detector is supplied with four channels:

- | | | | |
|---|---|---|--|
|  460 nm –
Blue Channel |  520 nm –
Green Channel |  630 nm –
Red Channel |  UV Channel –
255 nm or 275 nm |
|---|---|---|--|



Optionally, any four wavelengths starting from 255 nm can be selected to meet specific application requirements.

Special Features

- Factory-configured custom LED wavelength combinations
- Minimal sample dispersion at low flow rates
- Open serial command protocol for custom software development
- Reliable solid-state light source with no routine lamp replacement
- Built-in adjustable pressure regulator for a bubble-free optical path
- Optional analog output module for integration with external data acquisition and analytical systems

Key Advantages

 Optical cell volumes available in <3 µL and 10 µL	 High-speed acquisition at 20 samples per second per channel	 Custom wavelength options available from 255 nm and above	 Excellent linearity across a wide concentration range
 Compact and lightweight design	 Optional analog output	 Zero warm-up time	 USB-powered operation

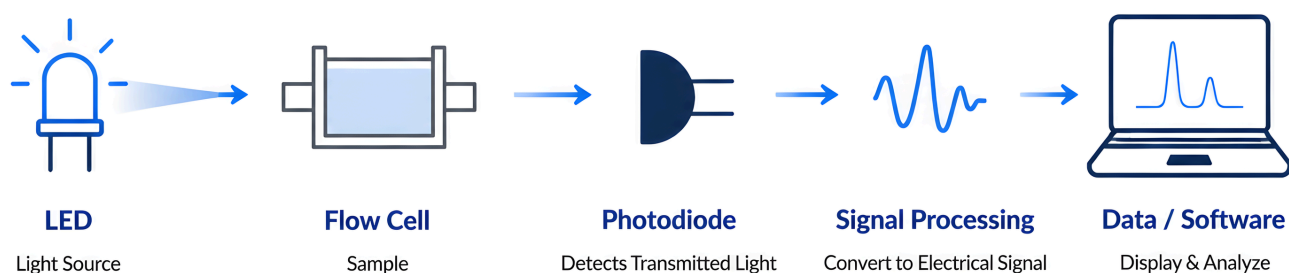
Software & Connectivity

- Direct Serial Commands – Serial Alltesta™ protocol
- 💻 Demo Software
- 📡 The output can be monitored directly via analog signal output

LED-Based Detection Technology

Unlike conventional UV-Vis detectors that rely on deuterium and tungsten lamps, the Alltesta™ Mini UV-Vis Detector utilizes highly stable LED light sources. This design provides instant start-up, low power consumption, long operational life, and eliminates the need for lamp replacement.

LED light sources produce a stable emission spectrum centered around their nominal wavelength.



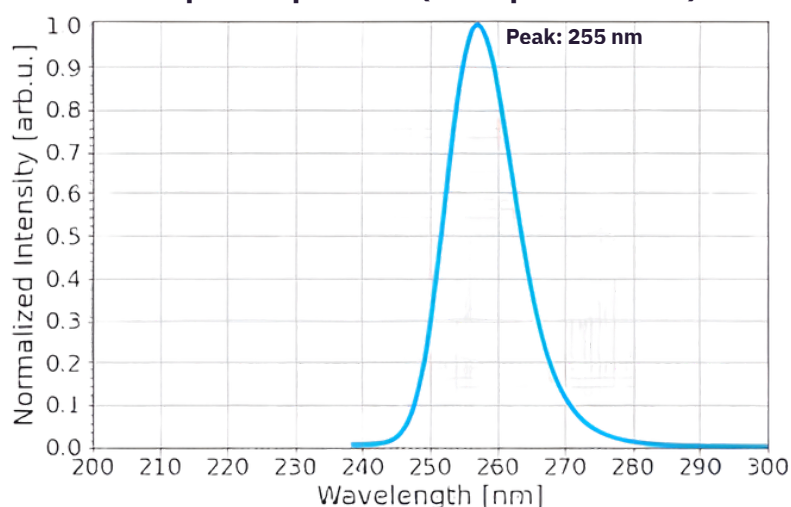
Why LED Technology?

 **Instant Start-Up**
Ready for operation immediately

 **Stable & Reproducible**
Consistent detection results

 **No Lamp Replacement**
No routine lamp replacement

Optical Spectrum (Example: 255 LED)



For example, a 255 nm LED delivers maximum intensity near 255 nm while also emitting light at neighboring wavelengths. This is a natural characteristic of LED technology and ensures reliable, reproducible detector performance.



Custom wavelength configurations are available with selectable wavelengths starting from 255 nm, allowing the detector to be optimized for the specific requirements of virtually any analytical method.

Technical Specifications

Alltesta™ Mini UV-Vis Detector (Standard configuration)

Dimensions (WHL)	63 x 46 x 116 mm / 2.48 x 1.81 x 4.57 in
Weight	0.25 kg / 0.55 lb
Optical Cell Volume	Available in 3 µL and 10 µL options
Cell Optical Path	3 mm and 7.0 mm (other types of cells are available)
Liquid Ports	10-32 UNF compression
Built-in pressure regulator	Adjustable, 10-75 psi internal pressure
Maximum cell pressure	250 psi (18 bar)
Wavelength Range, custom	255 nm and up
Wavelength Range, standard	275, 460, 520, 630
Simultaneous Wavelengths	4
Data Rate	20 sps/channel
Noise Level	0.02 - 0.05 mAU
Power	USB Type B
Analog Signal	
Analog voltage range output	-1V - +4.5V (-1AU - +4.5AU)
Digital-to-Analog Converter (DAC) resolution	20 bit
Data Rate	20 sps/channel
Wavelength Range, custom	255 nm and up, specify with order
Power	3.5 mm Jack Connector

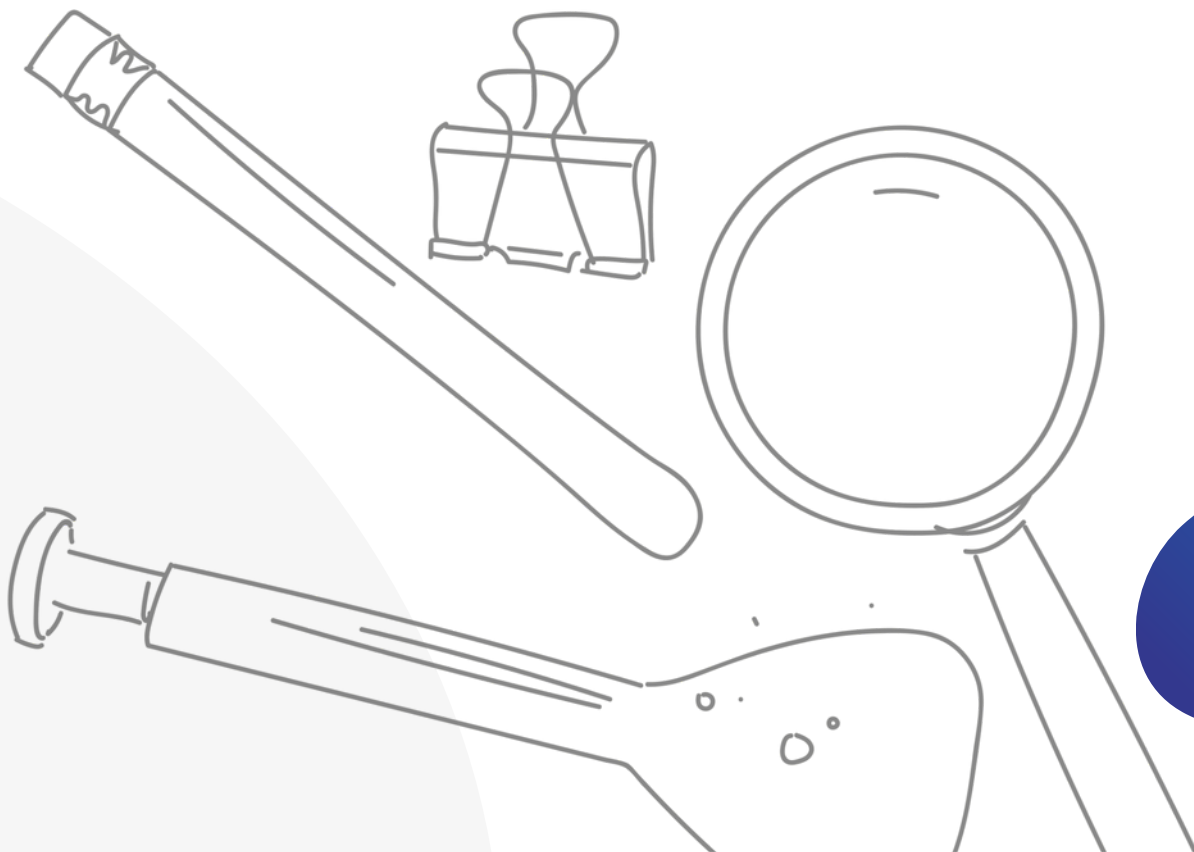
Call to Action

Unlock the Full Potential of Your UV-Vis Detection

- Contact us to place an order or ask questions.
- Request a free method development consultation.
- Schedule a demonstration to see our analyzers in action.
- Visit our website or scan the QR code below for more details.

Conclusion

The Alltesta™ Mini UV-Vis Detector combines compact design, reliable multi-wavelength detection, and flexible integration in a single device. With customizable LED wavelengths, USB-powered operation, and optional analog output, it is an ideal solution for modern analytical and OEM applications.





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