

KeyView™ UV Detectors for Preparative Chromatography



- ✦ Solid state technology for high reliability and durability
- ✦ High Absorbance Unit (AU) range for better visibility of preparative analyte peaks
- ✦ Multi-Channel (6-channel) including a mini-spectrum from 250 to 300 nm
- ✦ High-intensity 220 nm laser channel for narrow-band resolution
- ✦ Small form factor for easy integration

KeyView™ UV Detectors for Preparative Chromatography

KeyView™ Prep and KeyView Flash solid state UV detectors allow users to determine analyte concentrations with high absolute absorption for preparative chromatography. Using solid state technology, KeyView detectors use maximum light intensity to capture a higher dynamic range of high concentration analytes.

Phoseon's KeyView detectors allow users to consistently quantify and isolate fractions of proteins and biomolecules for pharmaceutical drug discovery research and development. Six simultaneous absorbance channels include a mini-spectrum in the critical 250 to 300 nm UV range. The near zero drift with KeyView gives users the confidence of highly reproducible results. KeyView detectors deliver higher sensitivity and/or dynamic range than deuterium lamps and is 100 times more stable.

Upgrade your LC system

Phoseon developed KeyView UV detectors for liquid chromatography and spectroscopy instruments to ensure reliable and accurate results for labs. KeyView products use proprietary and patented LED technology to provide users with a powerful solution that offers precise and predictable UV output. LEDs are inherently low-noise, stable, cool and controllable. They turn on in milliseconds to full brightness and last for greater than 10,000 hours. Phoseon's KeyView is ideal for protein purification, flash chromatography and small molecule production.



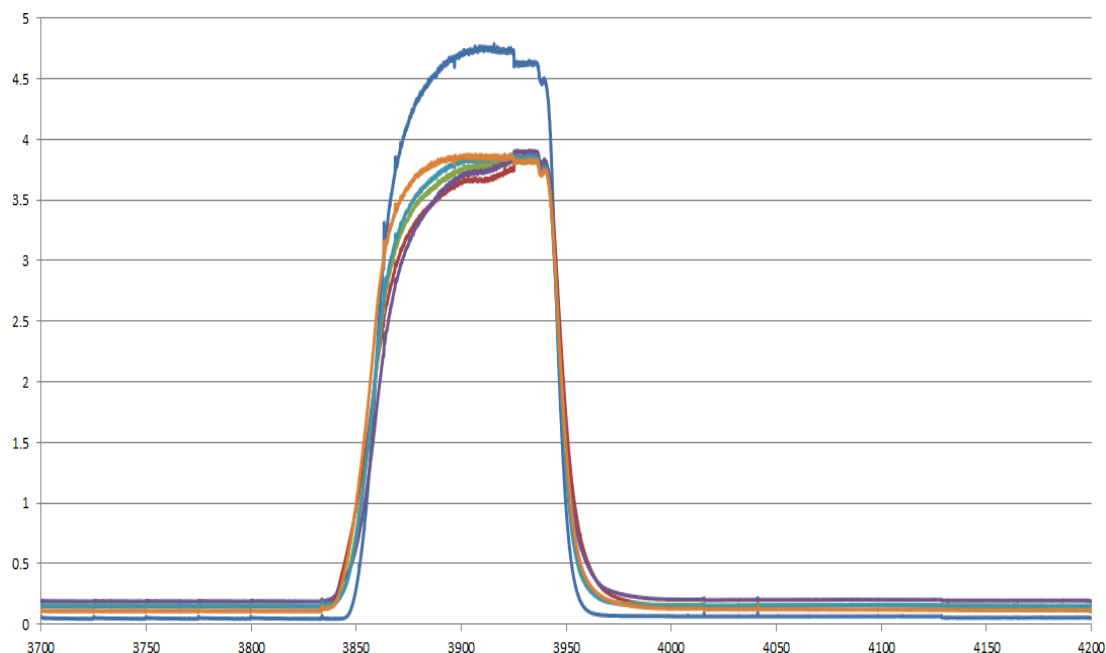
KeyView Prep™

Solid State LED + Laser

KeyView Prep and KeyView Flash use solid-state light sources to generate stable, long-lasting light. Deep UV detection is accomplished with a 220 nm laser capable of both high sensitivity and dynamic range, up to 4 AU (Absorbance Unit).

Flow Cell Compatibility

KeyView Prep is compatible with flow rates from 1 ml/min to 500 ml/min. KeyView Flash is designed for use with flow rates from 500 ml/min to 5 L/min. Together, the KeyView detector lineup covers the range from small, laboratory separations and protein purification to high-volume protein production.



Available Wavelengths - Multi-Channel Mini Spectrum

Many UV detectors for preparative chromatography depend upon 255 nm and 280 nm channels to determine peak purity with protein and nucleic acid co-elution. KeyView Prep and Flash run a simultaneous mini-spectrum between 255 and 295 nm to allow detailed analysis of peak purity and to detect unexpected co-elution in real-time.

Semiconductor Light Matrix (SLM)[™] Technology

KeyView detectors are based on Phoseon's patented Semiconductor Light Matrix (SLM)[™] technology that improves performance, offers ease-of-use, and increased productivity over traditional light sources like deuterium, tungsten, and xenon lamps. Light-Emitting-Diodes (LEDs) are inherently low-noise, low-drift, cool, and controllable. LEDs turn on in milliseconds to full brightness and last for greater than 10,000 hours.

Software

KeyView Prep integrates easily with most preparative chromatography systems, or you can use the KeyView application for independent control and monitoring.



Technical Specifications

KeyView Detector

Light Sources	Solid-state (Laser + LED)
Channels	6 simultaneous
Wavelengths	220 nm + UV mini-spectrum (255, 265, 275, 285, 295 nm)
Noise Min	3.96E-05 (255 nm channel)
Noise Max	5.10E-05 (220 nm channel)
Drift Min	7.05E-05 (255 nm channel)
Drift Max	1.82E-04 (285 nm channel)
Temperature	15 deg C to 30 deg C
Humidity	Up to 80% non-condensing for temperatures up to 30 deg C
Flow Rate	Supports flow rates up to 10 L/min
Startup Time	<30 sec
Electronic Control	Light output on/off and channel selection
Power Requirements	150 W, 12 VDC, 12.5 A External Power Supply
Certifications	RoHS, REACH

Flow Cells

PN	Material	Tubing Diameter	Pressure	Flow Rate	Path Length
A4066	Stainless	1/8"	200 bar	1000 ml/min	0.5 or 1.25 or 2 mm
A4068	Stainless	1/4"	200 bar	10,000 ml/min	0.5 or 1.25 or 2 mm
A4095	PEEK	1/16"	100 bar	250 ml/min	0.5 mm
A4067	PEEK	1/8"	100 bar	1000 ml/min	0.5 or 1.25 or 2 mm
A4068-2	Stainless	1/4"	200 bar	10,000 ml/min	0.5 or 1.25 or 2 mm
A4069	Stainless	1/16"	200 bar	250 ml/min	0.5 mm
A4045	PEEK	1/16"	30 bar	50 ml/min	3 mm
A4042	Stainless	1/16"	300 bar	50 ml/min	3 mm

About Phoseon Technology

Starting from 2002 in Portland Oregon USA, Phoseon Technology foresaw the value of LEDs for both Industrial Curing applications and Life Sciences solutions. Building from our strong background in solid-state semiconductor devices, we utilize native diodes to provide the optimum mix of power, uniformity and control for LED curing applications. The Company is 100% LED focused and provides both standard and custom solutions to OEMs and end-users worldwide.