



# v-kit delivers efficient and consistent qualification for HPLC

The v-kit LC Starter Pack contains software, traceable reference standards, SOPs, logbook and column for qualification of complete HPLC systems. v-kit enables qualification to be carried out independent of instrument manufacturer — and because it uses one standard approach, it allows consistent qualification across all equipment on all sites.

HPLC v-kit tests include:

- Pump flow rate accuracy and precision
- Gradient composition accuracy and linearity
- UV/Vis, PDA/DAD and fluorescence detector wavelength accuracy
- UV/Vis, PDA/DAD, fluorescence, refractive index and ELS and conductivity response linearity
- Autosampler injection volume precision and carry-over
- Autosampler injection volume linearity
- Column oven and autosampler tray temperature accuracy

Suitable for use with a wide range of instruments, including: Agilent, Dionex, Waters, Perkin Elmer, Shimadzu, Thermo, Merck Hitachi, Gilson and Varian.

## Seamless standards and software

The standard solutions integrate seamlessly with the v-kit software. Essential information regarding their traceability is automatically uploaded from the supplied dataset.

A Certificate of Analysis is provided with each batch of solutions. The solutions are provided in sealed glass vials with a batch number and expiry date.

Each solution is guaranteed to have a minimum one-year from date of shipment until expiry. The v-kit software prevents accidental use of out of date solutions.

The following solutions are available:

- UV wavelength accuracy (241-640nm)
- UV wavelength accuracy – far UV (205-271nm)
- UV response linearity
- Fluorescence response linearity & wavelength accuracy
- Refractive index response linearity
- Autosampler precision and linearity
- Gradient composition accuracy
- ELS response linearity
- Conductivity detector



## v-kit HPLC Starter Pack

The v-kit LC starter pack includes software, sufficient materials and an accessory kit to perform a complete HPLC qualification.

## Top-up with Refills

v-kits are topped up as needed with refill packs. These include all necessary consumables and extra licences, and can be ordered in any required quantity.

LC Refill kits include:

- System refills
- Detector only kits
- Service packs for large volume users

For more information about v-kit, including details of your local distributor, visit the v-kit website or contact v-kit's manufacturer — NLG-Analytical:

www.nlg-analytical.com  
t: +44(0)1260 274-266  
e: info@nlg-analytical.com

# v-kit for HPLC qualification

## v-kit advantages

- **Cost effective:** v-kit allows you to cut the cost of HPLC qualification by up to 80%
- **Harmonised:** v-kit uses one standard HPLC qualification approach for all instruments, all laboratories and all sites
- **Comprehensive:** v-kit consists of software, SOPs, and traceable reference standards
- Full SOP provided for each qualification test: saves time and effort
- User-friendly software: flexible, easy-to-use and independent of your chromatography data systems
- v-kit allows instrument vendors, service providers or equipment users to deliver HPLC qualification and calibration

**Contract service:** Suitably trained service engineers can provide a planned maintenance and qualification service using the unique v-kit qualification system

**Self-delivery:** Using your own laboratory analysts or in-house service personnel — full v-kit training and traceably calibrated tools are supplied by nlg-analytical or your local authorised v-kit vendor

- Used correctly, v-kit can aid compliance to regulations issued by international authorities such as FDA (USA), MHRA (UK), IMB (Ireland), etc.



## Ordering specifications

Part number	Item
VKIT31-I64	Gradient HPLC starter kit (with UV detector standards)
VKIT31-I64FL	Gradient HPLC system with FL detector Initia kit
VKIT31-I32RI	Isocratic HPLC system with RI detector Initia kit
VKIT31-IAF	HPLC auto-flow starter kit
Refill kits (- selection only. Please visit <a href="http://www.v-kit.com">www.v-kit.com</a> for a full list of available kits.)	
VKIT31-R64	Gradient HPLC system with UV detector refill kit
VKIT31-R16UV	UV/Vis detector refill kit
VKIT31-R16UVX	UVVis detector – extended wavelength refill kit
VKIT31-R16FL	Fluorescence detector refill kit
VKIT31-R16RI	Refractive index detector refill kit
VKIT31-R16ELS	Evaporative light scattering detector refill kit
VKIT31-R16CD	Conductivity detector refill kit
Tools	
VKIT-LFM(1/2/3)	HPLC Flowmeter with 1, 2 or 3-point UKAS calibration
VKIT-1514	HPLC Autosampler tray temperature probe
VKIT-1531	v-kit two-channel printing thermometer

to order call: +44(0)1260 274-266 e: [info@nlg-analytical.com](mailto:info@nlg-analytical.com)

## Qualification tools

These recommended tools for HPLC OQ integrate with the v-kit software and procedures. The range has been designed to ensure accuracy as well as to help to speed up the instrument testing process. The calibration on all tools is valid for one year and includes traceable calibration certificates.



v-kit liquid flowmeter



HPLC Autosampler tray temperature probe



v-kit 2-channel thermometer