OLIS Upcycled HP 8453 UV/Vis

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OLIS Software, Windows 10 Compatibility and a trusted UV/Vis Spectrophotometer

In 2018, we developed Windows 10 software for this solid-state diode array spectrometer introduced by Hewlett-Packard in the 1990s. If you are fortunate enough to own an original model, replace ChemStation with OlisWorks software; if you prefer this remarkably good UV/Vis (fourth decimal place noise and single nanometer spectral resolution) against plastic-rich models produced today, you can purchase a complete system from us.



Standard Acqusition Mode: Absorbance UV/Vis

Enhancements Supported:

Peltier Thermal Control Stopped Flow Titrator

OLIS UPCYCLED HP 8453 UV/VIS SPECIFICATIONS

Slit Width1 nm<0.03 % at 340 nm (NaNO2, ASTM)Stray Light<0.05 % at 220 nm (Nal, ASTM)<1 % at 198 nm (KCI, EP)<± 0.5 nm, 0.5 = second scan (NIST 2031)<± 0.2 nm at 486.0 and 656.1 nmWavelength Reproducibility<± 0.02 nm, ten consecutive scans (NIST 2034)<± 0.05 nm at 440.0, 465.0, 546.1, 590.0 and 635.0 nm, 1 A (NIST 930e)<± 0.01 nm at 235, 257, 313, 350, 430 nm (potassium dichromate, EP method)Photometric NoisePhotometric StabilityPhotometric StabilityBaseline Flatness<0.001 A, 0.5-second blank, 0.5-second scan, rms0.5 seconds, full rangeShortest Scan Time0.1 seconds, full range	Wavelength Range	190 - 1100 nm
<0.03 % at 340 nm (NaNO2, ASTM)	Slit Width	1 nm
Stray Light<0.05 % at 220 nm (Nal, ASTM) <1% at 198 nm (KCI, EP)	Stray Light	<0.03 % at 340 nm (NaNO ₂ , ASTM)
<1 % at 198 nm (KCI, EP)		<0.05 % at 220 nm (Nal, ASTM)
Wavelength Accuracy<± 0.5 nm, 0.5 = second scan (NIST 2031) <± 0.2 nm at 486.0 and 656.1 nmWavelength Reproducibility<± 0.02 nm, ten consecutive scans (NIST 2034)Photometric Accuracy<± 0.005 nm at 440.0, 465.0, 546.1, 590.0 and 635.0 nm, 1 A (NIST 930e) <± 0.01 nm at 235, 257, 313, 350, 430 nm (potassium dichromate, EP method)Photometric Noise<0.0002 A. sixty 0.5 second scans at 0 A, 500 nm, rmsPhotometric Stability<0.001 A/hr at 0 A, 340 nm, after 1-hour warm up, measured over 1 hour, every 5 seconds, constant ambient tempBaseline Flatness<0.001 A, 0.5-second blank, 0.5-second scan, rmsShortest Scan Time0.1 seconds, full range		<1 % at 198 nm (KCI, EP)
Wavelength Reproducibility<± 0.2 nm at 486.0 and 656.1 nm	Wavelength Accuracy	$<\pm$ 0.5 nm, 0.5 = second scan (NIST 2031)
Wavelength Reproducibility<± 0.02 nm, ten consecutive scans (NIST 2034)Photometric Accuracy<± 0.005 nm at 440.0, 465.0, 546.1, 590.0 and 635.0 nm, 1 A (NIST 930e)Photometric Accuracy<± 0.01 nm at 235, 257, 313, 350, 430 nm (potassium dichromate, EP method)Photometric Noise<0.0002 A. sixty 0.5 second scans at 0 A, 500 nm, rmsPhotometric Stability<0.001 A/hr at 0 A, 340 nm, after 1-hour warm up, measured over 1 hour, every 5 seconds, constant ambient tempBaseline Flatness<0.001 A, 0.5-second blank, 0.5-second scan, rmsTypical Scan Time0.5 seconds, full rangeO.1 seconds, full range0.1 seconds, full range		<± 0.2 nm at 486.0 and 656.1 nm
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Constant ambient temp Baseline Flatness <0.001 A, 0.5-second blank, 0.5-second scan, rms Typical Scan Time 0.5 seconds, full range Shortest Scan Time 0.1 seconds, full range	Photometric Stability	<0.001 A/hr at 0 A, 340 nm, after 1-hour warm up, measured over 1 hour, every 5 seconds,
Baseline Flatness<0.001 A, 0.5-second blank, 0.5-second scan, rmsTypical Scan Time0.5 seconds, full rangeShortest Scan Time0.1 seconds, full range		constant ambient temp
Typical Scan Time0.5 seconds, full rangeShortest Scan Time0.1 seconds, full range	Baseline Flatness	<0.001 A, 0.5-second blank, 0.5-second scan, rms
Shortest Scan Time 0.1 seconds, full range	Typical Scan Time	0.5 seconds, full range
	Shortest Scan Time	0.1 seconds, full range
Time Until Next Scan 0.6 seconds, full range, 0.1-second scan, up to 150 consecutive scans	Time Until Next Scan	0.6 seconds, full range, 0.1-second scan, up to 150 consecutive scans

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