



Variable.Pathlength.Extension

SoloVPE

Variable Pathlength Technology

System Specifications



Introduction

C Technologies, Inc.'s SoloVPE System is the world's first Slope Spectrometer. Fundamentally, the SoloVPE is a UV-Vis measurement platform that has been made more powerful through the addition of patented variable pathlength technology. The primary system components include: the Agilent Cary 60 spectrophotometer that serves as the measurement engine providing the core capabilities of light source and detection, a fiber optic coupler, a command and control PC running the Windows® operating system and the Agilent Cary WinUV software and the SoloVPE, the variable pathlength extension which is the enabling technology for making Slope Spectroscopy based measurements.

Slope Spectroscopy® methods are based upon the Beer-Lambert law and enable accurate direct measurements of highly concentrated samples without dilution and frequently without the need for baseline correction.

The Originators of **Slope** spectroscopy®



Features, advantages and benefits

Features	Advantage / Benefit
<i>No dilutions</i>	Measure highly concentrated samples directly without dilution.
<i>Eliminate background correction</i>	Buffer / Background Correction only required in special circumstances
<i>Reduced sample prep</i>	Direct measurement of High Concentrations without baseline correction saves times
<i>Rapid results</i>	Concentration results in about 1 minute
<i>Low sample volume</i>	Use only as much sample as required, can be reclaimed
<i>Common platform</i>	Complete UV-Vis platform for your operation
<i>Slope Spectroscopy[®] methods</i>	The first and only slope spectrometer, capable of Slope Spectroscopy [®] based measurements. Results based upon broad data based slopes values instead of single point Absolute Absorbance values
<i>System repeatability</i>	Repeatability Better Than $\pm 2\%$
<i>Rapid sample characterization</i>	Rapidly characterize unknown samples with broad wavelength and pathlength surveys
<i>Education / Support</i>	On-site installation and training included with system purchase.

System Hardware

Spectrophotometer engine

Agilent[®] Cary 60 Spectrophotometer

Variable pathlength extension

C Technologies, Inc. SoloVPE

Fiber optic coupler

C Technologies, Inc. Dual Use – Fiber Optic Coupler

Command and control

Agilent[®] Cary 60 Compatible Windows[®] based PC

Software Information

Operating system

Microsoft Windows[®] 7

Command and control software

Agilent[®] Cary WinUV Software Suite (Version 5.0)

Security companion software (*Optional Add On*)

SecureVPE Security Software to support compliant installations

Included standard software

Agilent Cary WinUV, SoloVPE Software, PDF Writer Utility

SoloVPE Device Specifications

Pathlength range	0.005 mm to 15.000 mm
Pathlength resolution/step	0.005 mm
Physical dimensions:	8.5" [216 mm] (W) x 8.5" [216 mm] (D) x 12" [305 mm] (H)
Weight:	17 lbs. [8 Kg]
Pathlength accuracy	± 1% at 0.500 mm
Slope linearity	$R^2 \geq 0.999$
Sample vessel materials	Silica / Plastic
Fibrette material	Silica / Polyimide
Volume requirements	Pathlength/Concentration Dependent
Carryover	Consumable Fibrette Eliminates Carryover risk
Power requirements	The SoloVPE has no power supply. It is seamlessly integrated with the Cary Spectrophotometer and draws its power from the instrument.

Customer support options

Support and training	<p>C Technologies, Inc. is committed to your success. Our service and support options include:</p> <ul style="list-style-type: none">• IQOQ Included with purchase• On-site training included with purchase• Full 12 month warranty support• Seven (7) year hardware support period from date of last unit manufacture.• Single and multi-year Service Contract options which include an annual PM Service• PM Services• Remote and on-site training and support• Software support services
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Further Details

Getting more information

For additional information please contact C Technologies, Inc. or your authorized representative. Visit our website: solovpe.com



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ctechnologiesinc.com

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