

SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER



SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER

Designed to conserve benchspace, our product offers the measurement range of 190-1100nm at bandwidth of 2nm. Engineered for a wide range of applications, our systems provide dependable performance and reliable results. It produces the photometric range of -0.3 to 3 A; 0-200 %T and photometric accuracy of $\pm 0.3\%T$ which makes it suitable for various quantitative assays.

Used in Most suitable for quantitative determination assays and toxicological assays in environmental, industrial, pharmaceutical fields..

Also known as Vis Spectrometer, UV-Vis Spectrometer, Spectrometers, visible spectrophotometer.

SPE11-0320 SINGLE BEAM VISIBLE SPECTROPHOTOMETER

Wavelength range: 320nm-1100nm

Optical System: 1200 lines/mm line Czerny Turner Diffraction Grating monochromator ensures high resolution, high photometric accuracy and low stray light

Bandwidth: 2nm

Detector: Silicon Photodiode

Measurement Range with ultra-low Stray Light With its ultra-low stray light $\leq 0.05\%T$ is achieved on wavelength range of 320 - 1100 nm

Sample size: A wide range of standard cuvettes can be used based on the sensitivity or sample volume requirements.

Sophisticated and simplified sample analysis software: The Sample analysis software deliver scanning, fixed wavelength analysis, quantitative analysis, data collection, storage, export, and reporting.

With additional feature of an easy access USB port available in the unit, which enables results to be stored directly to a USB memory stick for easy transfer of data.

Suspended posture optical system

24-bit high speed and high precision A/D conversion technique improves sensitivity

Can store up to 200 groups of data and 200 standard curves

Automatic wavelength setting

Automatic wavelength calibration and automatic deviation repair

USB port and parallel port

Inclusive of standard PC software



SPECIFICATIONS

Model	SPE11-0320
Wavelength Range	320-1100 nm
Wavelength Accuracy	± 0.5 nm
Wavelength Reproducibility	≤ 0.2 nm
Wavelength Repeatability	≤ 0.2 nm
Spectral Bandwidth	3 nm
Photometric Range	0.200 %T, -0.3-3 A, 0-9999 C
Photometric Accuracy	± 0.3 %T
Photometric Repeatability	≤ 0.15 %T
Stability	± 0.0001 A/hr at 500 nm
Baseline Flatness	± 0.0001 A/h
Stray Light	≤ 0.05 %T

Light Source	Tungsten-Halogen Lamp
Photometric Mode	≤0.05 %T
Software	USB
Gross Dimension (W/D/H)	460x380x180 mm
Display	LCD (228x64 pixel)
Noise	≤0.0005A
Weight (Net/Gross)	15 kg
Power	300 W
Power Supply	AC 220V/50Hz or AC110/60Hz

ACCESSORIES

Accessory Code	Name	Unit
2900505018	Glass cuvette (10 mm)	4 pcs
2900505022	Dustproof cover	1 pc
2900505025	Software CD	1 pc
2900505027	USB Cable	1 pc
2900505029	Power cord	1 pc
2900505031	Softdog	1 pc

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Light Path LxWxH (mm)	Volume	Unit	Light Path LxWxH (mm)
2900505006	Single Position Water Jacketed Ambient Cell Holder	10 mm				
2900505007	4-Position Cell Holder	10 mm				
2900505008	4-Position Cell Holder	50 mm				
2900505009	4-Position Cell Holder	100 mm				
2802305005	Adjustable Cell Holder for Micro Cuvettes					
2802305006	Transparent Film Holder					
2900505011	Tube Holder					
2900505012	Thermostatic Controller					
2900505013	Auto Sampler					
2900505014	Auto Thermostatic Sampler					
2900505015	Micro Printer					
2900505016	Tungsten Lamp 6V; 10W (PH)					
2900505017	Tungsten Lamp 12V; 20W (PH)					
2900505019	Tungsten Lamp 12V; 20W (OSRAM)					
2900505023	Glass Cuvette		5x10x45	1.7 ml	Set (4 pcs)	
2900505024	Glass Cuvette		10x10x45	3.5 ml	Set (4 pcs)	
2900505026	Glass Cuvette		20x10x45	7 ml	Set (4 pcs)	
2900505028	Glass Cuvette		30x10x45	10.5 ml	Set (4 pcs)	
2900505030	Glass Cuvette		40x10x45	14 ml	Set (4 pcs)	
2900505032	Glass Cuvette		50x10x45	17.5 ml	Set (4 pcs)	
2900505033	Glass Cuvette		100x10x45	35 ml	Set (4 pcs)	
2900505034	Quartz Cuvette		5x10x45	1.7 ml	Set (2 pcs)	

2900505035	Quartz Cuvette		10x10x45	3.5 ml	Set (2 pcs)	
2900505036	Quartz Cuvette		20x10x45	7 ml	Set (2 pcs)	
2900505037	Quartz Cuvette		30x10x45	10.5 ml	Set (2 pcs)	
2900505038	Quartz Cuvette		40x10x45	14 ml	Set (2 pcs)	
2900505039	Quartz Cuvette		50x10x45	17.5 ml	Set (2 pcs)	
2900505040	Quartz Cuvette		100x10x45	35 ml	Set (2 pcs)	
2900505041	Micro Quartz Cuvette		10x2x2.5	50 µl	Set (2 pcs)	
2900505042	Micro Quartz Cuvette		10x2x5	100 µl	Set (2 pcs)	
2900505043	Micro Quartz Cuvette		10x2x10	200 µl	Set (2 pcs)	
2900505044	Micro Quartz Cuvette		10x2x25	500 µl	Set (2 pcs)	
2900505045	Micro Quartz Cuvette		10x2x45	700 µl	Set (2 pcs)	
2901805005	Quartz Flow Cuvette				Set (2 pcs)	
2900505046	Micro Quartz Cuvette				Set (2 pcs)	10x2x45

SPE11 SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER

Wavelength range: 190nm-1100nm

Bandwidth: 2nm

Detector: Silicon Photodiode

Stray Light: It is achieved in range of $\leq 0.05\%T$

Light source: Deuterium and tungsten halogen lamp

A wide range of standard cuvettes can be used based on the sensitivity or sample volume requirements

The sample analysis software provides the scanning, fixed wavelength analysis, quantitative analysis, data collection, storage, export, and reporting.

USB port and parallel port

Inclusive of standard PC software

With additional feature of an easy access USB port available in the unit which enables results to be stored directly to a USB memory stick for easy transfer of data. It can store up to 200 results.

Provides Photometric, Quantitative, Kinetics, Wavelength scan, Multi-wavelength and DNA/Protein Test functions

Enables building of calibration curves and further implementation of associated tests

Formation of multi-point standard curve using calibration curve method enables measurement of unknown sample concentration

Implements sample measurement after addition of coefficient of curvilinear equation using coefficient method

Automatic wavelength calibration and automatic deviation repair

Easy changing of deuterium and tungsten lamp excluding the need for debugging



SPECIFICATIONS

Model	SPE11-0190	SPE11-1100
Wavelength Range	190-1100 nm	
Wavelength Accuracy	$\pm 1\text{nm}$	$\pm 0.5\text{ nm}$
Wavelength Reproducibility	$\leq 0.3\text{ nm}$	$\leq 0.2\text{ nm}$
Wavelength Repeatability	$\leq 0.3\text{ nm}$	$\leq 0.2\text{ nm}$
Spectral Bandwidth	2 nm	1.8 nm
Photometric Range	0.200%T, -0.3-3A, 0-9999C	

Photometric Accuracy	±0.5 %T	±0.3 %T
Photometric Repeatability	≤0.2 %T	≤0.15 %T
Stability	±0.0001 A/h at 500 nm	
Baseline Flatness	±0.004 A	±0.0001 A
Stray Light	≤0.05 %T	
Light Source	Deuterium Lamp and Tungsten-Halogen Lamp	
Gross Dimension (W/D/H)	420x300x160 mm	460x380x180mm
Display	128x64 Dots LCD	LCD (320x240 pixel)
Noise	±0.004 A	±0.0005A
Weight (Net/Gross)	13 kg	20 kg
Power	300 W	
Power Supply	AC 220V/50Hz or AC110/60Hz	

ACCESSORIES

Accessory Code	Name	Unit	For Models
2900505018	Glass cuvette (10 mm)	4 pcs	All
2900505020	Quartz cuvette (10 mm)	2 pcs	All
2900505022	Dustproof cover	1 pc	All
2901614005	Power Cord (US/EU)	2pcs	SPE11-0190
2900505025	Software CD	1 pc	All
2900505027	USB Cable	1 pc	All
2900505029	Power cord	1 pc	SPE11-1100
2900505031	Softdog	1 pc	SPE11-1100

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Light Path LxWxH (mm)	Volume	Unit	Light Path LxWxH (mm)	For Models
2900505006	Single Position Water Jacketed Ambient Cell Holder	10 mm					All
2900505007	4-Position Cell Holder	10 mm					All
2900505008	4-Position Cell Holder	50 mm					All
2900505009	4-Position Cell Holder	100 mm					All
2802305005	Adjustable Cell Holder for Micro Cuvettes						All
2802305006	Transparent Film Holder						All
2900505011	Tube Holder						All
2900505012	Thermostatic Controller						All
2900505013	Auto Sampler						All
2900505014	Auto Thermostatic Sampler						All
2900505015	Micro Printer						All
2900505016	Tungsten Lamp 6V; 10W (PH)						All
2900505017	Tungsten Lamp 12V; 20W (PH)						All
2900505019	Tungsten Lamp 12V; 20W (OSRAM)						All
2900505021	D2 Lamp A510YXU Milasi						All
2900505023	Glass Cuvette		5x10x45	1.7 ml	Set (4 pcs)		All

2900505024	Glass Cuvette		10x10x45	3.5 ml	Set (4 pcs)		All
2900505026	Glass Cuvette		20x10x45	7 ml	Set (4 pcs)		All
2900505028	Glass Cuvette		30x10x45	10.5 ml	Set (4 pcs)		All
2900505030	Glass Cuvette		40x10x45	14 ml	Set (4 pcs)		All
2900505032	Glass Cuvette		50x10x45	17.5 ml	Set (4 pcs)		All
2900505033	Glass Cuvette		100x10x45	35 ml	Set (4 pcs)		All
2900505034	Quartz Cuvette		5x10x45	1.7 ml	Set (2 pcs)		All
2900505035	Quartz Cuvette		10x10x45	3.5 ml	Set (2 pcs)		All
2900505036	Quartz Cuvette		20x10x45	7 ml	Set (2 pcs)		All
2900505037	Quartz Cuvette		30x10x45	10.5 ml	Set (2 pcs)		All
2900505038	Quartz Cuvette		40x10x45	14 ml	Set (2 pcs)		All
2900505039	Quartz Cuvette		50x10x45	17.5 ml	Set (2 pcs)		All
2900505040	Quartz Cuvette		100x10x45	35 ml	Set (2 pcs)		All
2900505041	Micro Quartz Cuvette		10x2x2.5	50 ml	Set (2 pcs)		All
2900505042	Micro Quartz Cuvette		10x2x5	100 µl	Set (2 pcs)		All
2900505043	Micro Quartz Cuvette		10x2x10	200 µl	Set (2 pcs)		All
2900505044	Micro Quartz Cuvette		10x2x25	500 µl	Set (2 pcs)		All
2900505045	Micro Quartz Cuvette		10x2x45	700 µl	Set (2 pcs)		All
2901805005	Quartz Flow Cuvette				Set (2 pcs)		All
2900505046	Micro Quartz Cuvette				Set (2 pcs)	10x2x45	All
2900505010	8-Position Cell Holder	10 mm					SPE11-1100



SPE11-0190



SPE11-1100

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