

UV/VIS Spectrophotometer

The new JASCO Model V-530 Spectrophotometer is the most versatile, economical and reliable instrument in the general purpose UV/Visible class. Like the more sophisticated V-series instruments, the V-530 is based on more than 25 years of Jasco experience with advanced optics and state-of-the-art computer technology as well as inputs from thousands of users worldwide. The V-530 proves a highly accurate and reliable instrument able to fit a variety of applications from routine analysis through advanced research.

The V-530 can be configured for individual needs offering control by either a Windows[®] based PC or by the simplified intelligent Remote Module (iRM) both via the standard RS-232C interface. The low cost iRM offers easy data acquisition and processing using a large backlit touch-screen LCD display designed for quick, simplified routine applications. The V-530 can be quickly upgraded to full PC control by connecting the RS-232C cable to the standard interface provided on all PC's. The new JASCO Spectra Manager is the same 32-bit Windows program provided with all higher end JASCO spectroscopy products. Spectra Manager provides the operator with a wide range of tools to enable flexible data acquisition modes, complete data processing, custom printing and instrument validation. Because Spectra Manager is common for all JASCO spectroscopy products, data files from Fluorescence, FTIR, CD and other instruments can be easily imported for comparison, display and printing.

Features**Simplicity and ease of use**

Both the iRM and PC software are written in an intuitive manner allowing even first time users to measure with confidence.

Compact design

The optical bench of the V-530 is a compact 484 (W) x 477 (D) x 205 (H) mm saving space in the crowded modern laboratory.

Excellent optical performance

Double beam technology and high-quality concave grating result in excellent spectroscopic performance. Reducing stray light to 0.04% enables highly precise measurement in a wide photometric range.

High speed scanning

Bright optics and fast response detectors allow the V-530 to scan at speeds up to 4000 nm/min. without tracking error.

Versatility

A full complement of sampling accessories such as cell holders, flow cells, temperature controllers and software packages such as Kinetic and Protein-nucleic acid analysis are available to optimize the V-530 for specific applications.

Validation

For laboratories concerned about GMP/GLP compliance, the V-530 offers an optional validation software package to ensure instrument and data integrity.

SPECIFICATIONS

Hardware specifications

Optical system:	Double beam, single monochromator with a 1200 grooves/mm concave grating and modified Rowland mount
Spectral bandwidth:	2 nm
Wavelength range:	190 - 1100 nm
Light sources:	Deuterium lamp for UV range (190 - 350 nm), Halogen lamp for VIS range (330 - 1100 nm)
Light source switching:	Selectable within a range of 330 to 350 nm
Wavelength repeatability:	± 0.1 nm
wavelength accuracy:	± 0.5 nm
Photometric modes:	Abs, %T, %R
Photometric range:	-2 - 3 Abs
Photometric reproducibility:	± 0.001 Abs (0 - 0.5 Abs) ± 0.002 Abs (0.5 - 1 Abs) ± 0.15 %T
Photometric accuracy:	± 0.002 Abs (0 - 0.5 Abs) ± 0.004 Abs (0.5 - 1 Abs) ± 0.3 %T
Stray light:	(Above figures obtained using NIST SRM 930D) 0.04 %T both at 220 nm with NaI 10 g/l solution and at 340 nm with NaNO ₂ 50 g/l solution
Wavelength scan speed:	4000, 2000, 1000, 400, 200, 100, 40 nm/min
Wavelength slew speed:	8000 nm/min
Sampling interval:	0.1, 0.2, 0.5, 1, 2 nm/data (spectral scan mode) 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10 sec/data (time scan mode)
Baseline stability:	± 0.001 Abs/hour Response: Slow (250 nm, lamp on longer than 60 min, temperature variation ± 5°C)
Baseline flatness:	± 0.001 Abs within 200 - 1000 nm range after baseline correction Response: Medium
Response:	Scan speed: 100 nm/min Quick, Fast, Medium, Slow
Detector:	Silicon photo-diode (S1337)
output port:	RS-232C interface
Power requirement:	130W
Dimensions:	484 (W) x 477 (D) x 205 (H) mm
Net weight:	approx. 16 kg

STANDARD ACCESSORIES

V-530 basic unit	
- Spectrophotometer	1 set
- AC power cable	1 pc.
- RS-232C cable	1 pc.
- Spare fuses	2 pcs.
- Hexagonal wrench	1 pc.
- Instruction manual	1 copy

ORDERING INFORMATION

Code No.	Description
6736-J004A	V-530 UV/VIS Spectrophotometer (basic unit)
4880-0464J	VWS-580 Spectra Manager software
6736-J003A	IRM-559 intelligent Remote Module



OPTIONAL ACCESSORIES

Code No.	Description
Validation Software	
4880-0466C	VWVD-582 Validation software for Spectra Manager
4880-0255F	VDP-564 Validation card for IRM-559
Optional Software for Spectra Manager	
4880-0474D	VWLS-591 Long time scan measurement software
4880-0468C	VWPK-584 Parallel kinetics software
4880-0469B	VWDM-585 DNA melting software
4880-0472B	VWPN-588 Protein Nucleic acid quantitative software
4880-0478B	VWIS-595 Interval scan software
4880-0479A	VWIT-596 Temperature interval scan software
4880-0473A	VWGA-589 Band gap measurement software
4880-0467C	VWMC-583 Multi component analysis software
4880-0470C	VWFT-586 Film thickness software
4880-0465E	VWTS-581 Color analysis software
4880-0476A	VWAC-593 ASTM color analysis software
4880-0475A	VWSC-592 Saybolt color software
4880-0471A	VWDT-587 Visible/Solar light transmit/reflect software
4880-0477A	VWPL-594 PLS method software
4880-0714A	VWMC-622 Macro command
Optional ROM/RAM Card for IRM-559	
4880-0251A	RAM-560 Parameter memory card
4880-0252A	RAM-561 Data memory card
4880-0256C	KAP-565 Kinetics analysis card
4880-0259D	PNA-568 Protein nucleic acid quantitative analysis card
4880-0257B	TSV-566 Color analysis card
4880-0258C	FTM-567 Film thickness measurement card
4880-0253C	UCP-562 User calculation program card
4880-0254B	MCC-563 Macro command card
Cell Holders	
6703-J112A	USE-493 Single rectangular cell holder, standard
6156-J066A	CYH-354 Cylindrical cell holder
6156-J060A	LSE-331 Longpath rectangular cell holder
6522-J025A	EMC-418 Micro cell holder
Manual Cell Changers	
6178-J053A	SSE-343 6-position cell holder
6156-J052A	FSE-332 4-position long path cell holder
6156-J058A	MHT-344 Water thermostatable 4-position turret cell holder
6708-J228A	NCP-511 6-position automatic cell changer
Automatic Cell Changers	
6708-J128A	NCP-508 Water thermostatable 6-position automatic cell changer
6708-J018A	PSC-498 Peltier thermostatted 6-position automatic cell changer
6522-M039A	STR-458 Water thermostatable single cell holder with stirrer
Thermostatable Single Cell Holders	
6708-J011A	EHC-477 Peltier thermostatted single cell holder (Air-cooled)
6708-J025A	ETC-505 Peltier thermostatted single cell holder (Water-cooled)
6156-J070A	HMC-358 Water thermostatable micro cell holder
Sippers	
6708-J129A	NPF-509 Peristaltic sipper
6708-J012A	PQF-478 Peristaltic sipper
6708-J015A	LQF-481 Long light path peristaltic sipper
6708-J013A	QFS-479 Vacuum sipper (Tygon tubing)
6708-J014A	QFS-480 Vacuum sipper (Teflon tubing)
Flow Cells	
6156-J057A	SFC-333 Flow cell unit
6156-J055A	MFC-338 Micro flow cell unit
6156-J101A	FIC-361 Micro flow cell unit for flow injection
Autosampler	
6774-J001A	ASU-605 ASU-605 Auto sampler
Syringe Pump	
6708-J051A	NCS-609 Syringe pump
Accessories for Solid Samples	
6708-M101A	FLH-466 Film holder
6708-M102A	FLH-467 Film holder
6522-J036A	RSH-452 Rotation sample holder
6748-J047A	SLM-468S Single reflection attachment

● Specifications are subject to change without notice.

JASCO®

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