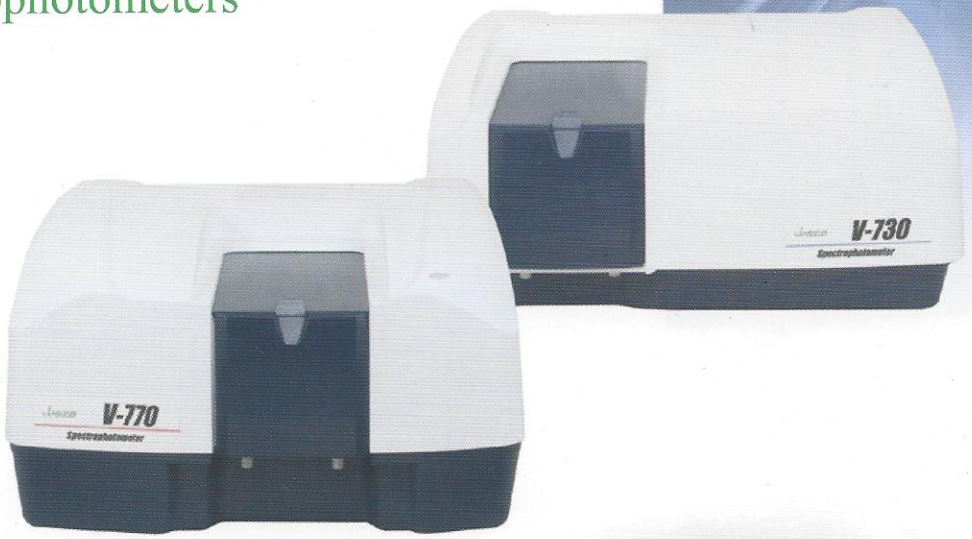
JASCO

V-700 series optional accessories

UV/Vis/NIR Spectrophotometers

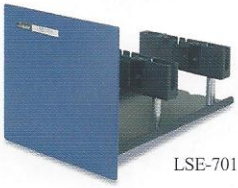


Wide range of optional accessories

The V-700 Series can be integrated with a complement of more than 70 accessories to offer flexible configurations for a wide variety of analytical requirements. Experimental capabilities range from simple educational applications and routine daily use, to specific applications for advanced biochemical and semiconductor research. The range of accessories include various types of cell holders for liquid samples and options for a wide variety of solid samples.

Cell holders/cell changers used at ambient temperature

LSE-701 Long path cell holder



LSE-701

Specifications:
Compatible cell: Rectangular cell, pathlength 10, 20, 50 or 100 mm, 1 pc.
Reference: Rectangular cell, pathlength 10, 20, 50 or 100 mm, 1 pc.

FSE-702 4-position manual long path cell changer



FSE-702

Specifications:
Compatible cell: Rectangular cell, pathlength 10, 20, 50 or 100 mm, 4 pcs.
Reference: Rectangular cell, pathlength 10, 20, 50 or 100 mm, 1 pc.

SSE-704 6-position manual cell changer



SSE-704

Specifications:
Compatible cell: Rectangular cell, pathlength 10 mm, 6 pcs.
Reference: Rectangular cell, pathlength 10 mm, 1 pc.

NCP-705 6-position automatic cell changer



NCP-705

Specifications:
Compatible cell: Rectangular cell, pathlength 10 mm, 6 pcs.
Reference: Rectangular cell, pathlength 10 mm, 1 pc.
Cell switching: Software controlled

CYH-708 Cylindrical cell holder



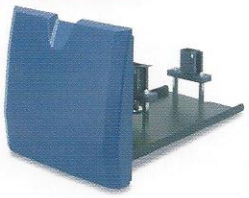
CYH-708

Specifications:
Compatible cell: Cylindrical cell, pathlength 10, 20, 50 or 100 mm, 1 pc.
Reference: Cylindrical cell, pathlength 10, 20, 50 or 100 mm, 1 pc.

Micro, Ultra-micro cell holders

UCB-710 Standard rectangular cell holder

Micro cell



UCB-710

This is the standard cell holder for the V-730BIO. A cell height adjustment function provides the ability to use a 100 µL micro cell. A mask for a 100 µL micro cell is standard.

Specifications:
Compatible cell: Rectangular cell, pathlength 10 mm, 1 pc.

Option
50 µL micro cell mask

SAH-769 One drop accessory



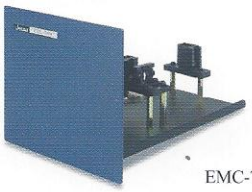
SAH-769

The SAH-769 One Drop accessory is a dedicated accessory for the V-700 Series to measure micro-volume samples of protein and nucleic acid.

Specifications:
1 mm pathlength minimum sample volume: 5 µL
0.2 mm pathlength minimum sample volume: 0.6 µL

EMC-759 Ultra-micro cell holder

V-730/730BIO



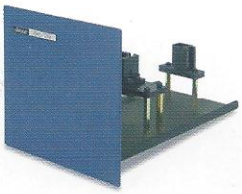
EMC-759



5 µL micro cell

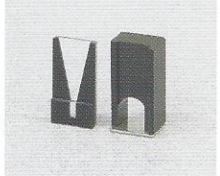
EMC-709 Micro cell holder

The EMC-709 is a cell holder for a 50 µL micro cell. A 5 µL micro cell can be used with an optional spacer.



EMC-709





TCH-703 8-position Micro turret cell holder

V-730/730BIO



TCH-703

This is a cell holder for an optional 8-position turret micro cell, containing eight cells with a volume of approximately 4 µL arranged in a circle.



8-position micro turret cell

Constant temperature cell holders/cell changers

The following cell holder accessories can be used with water circulators for maintaining samples at a uniform temperature. The circulators available separately.

STR-773 Water thermostatted cell holder with stirrer

Micro cell



STR-773

Specifications:
Compatible cell:
Rectangular cell,
10 x 10 or 4 x 10 mm, 1 pc.
Temperature control:
Thermostatted water circulation for sample and reference
Operating temperature:
10 to 90°C
Stirring system:
Integrated variable speed magnetic stirrer
2 mm path width micro cell cannot be used with the stirrer.

MHT-745 Manual 4-position water thermostatted turret cell holder

Micro cell



MHT-745

Specifications:
Compatible cell:
Rectangular cell,
10 x 10 or 4 x 10 mm, 4 pcs.
10 x 10 or 4 x 10 mm, 1 pc. (Reference)
Temperature control:
Thermostatted water circulation for sample and reference
Operating temperature:
10 to 90°C

CSP-909 Optional lid for sample compartment with syringe port



CSP-909

When monitoring a substrate-enzyme reaction, this accessory allows addition of an enzyme solution without opening the sample chamber lid. Can only be used with a 10 × 10 rectangular cell. Required needle length for the syringe is 2 inches (50 mm) .

Specifications:
Compatible cell holder:
STR-733, EHCS-760, ETCS-761,
ETCR-762

HMC-711 Water thermostatted micro cell holder

Micro cell



HMC-711

Minimum sample volume is 50 µL by using a rectangular cell, 5 mm path length and 2 mm path width.

Specifications:
Compatible cell:
Rectangular cell,
10 x 10 or 5, 2 or 4 x 10, 2 x 5 mm, 1 pc.
Temperature control:
Thermostatted water circulation for sample and reference
Operating temperature:
10 to 90°C
Cell masks (standard):
Mask for 100 µL cell (2 pcs.) for micro cell, 2 × 10
Mask for 200 µL cell (2 pcs.) for micro cell, 4 × 10

NCP-706 Water thermostatted 6-position automatic cell changer

Micro cell



NCP-706

Specifications:
Compatible cell:
Rectangular cell,
10 x 10 or 5, 2 or 4 x 10, 2 x 5 mm, 6 pcs.
10 x 10 or 5, 2 or 4 x 10, 2 x 5 mm, 1 pc. (Reference)
Temperature control:
Thermostatted water circulation for sample and reference
Operating temperature:
10 to 90°C
Cell switching:
Software control

Peltier thermostatted cell holders/cell changers

EHCS-760 Peltier thermostatted single cell holder (air-cooled)
ETCS-761 Peltier thermostatted single cell holder (water-cooled)
ETCR-762 Peltier thermostatted single cell holder (water-cooled, thermostatted reference)

Micro cell



EHCS-760



ETCS-761



ETCR-762

Specifications:

Model name	EHCS-760	ETCS-761	ETCR-762
Compatible cell	Rectangular cell, 10 x 10 or 4 x 10 mm, 1 pc.		
Temperature control system	Sample only	Sample only	Sample and Reference
	Heating/cooling system utilizing Peltier effect		
Heat radiating system	Air-cooled	Water-cooled	
Stirring system	Integrated variable speed magnetic stirrer		
Temperature setting range	5 to 70°C	-10 to 110°C	
Temperature control range	10 to 60°C (at 25°C)	0 to 100°C (for cooling water temperature at 20°C)	
Temperature control accuracy	±0.1°C (cell holder sensor)		
Temperature accuracy	With cell holder sensor: ±0.5°C (20°C to 40°C), ±1°C (other temp. range) With optional temp. sensor: ±0.2°C		

Options for EHCS-760/ETCS-761/ETCR-762

Cell mask kit
This kit includes sample masks and a cell-height adjustment stand to raise the cell height. Using the cell-height adjustment stand, a 2 mm path width micro cell can be used to measure sample with a minimum 100 µL volume.

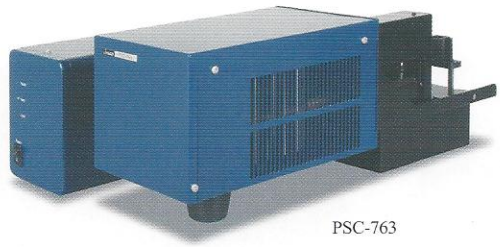
OPS-515 In-cell sensor with holder (factory option)
This is an optional sensor which can be used to monitor the temperature inside of the sample cell.

Cell spacers
Spacers for cells with an optical path length of 1, 2 and 5 mm are available..

Peltier thermostatted cell changers

PSC-763 Automatic 6-position Peltier cell changer (air-cooled)

Micro cell



PSC-763

Specifications:

Compatible cell:	Rectangular cell, 10 × 10, 2 or 4 × 10 mm, max. 6 pcs.
Reference:	Rectangular cell, 10 × 10, 2 or 4 × 10 mm, 1 pc.
Temperature control system:	Heating/cooling system utilizing Peltier effect (Sample side only)
Heat radiating system:	Air-cooled
Stirring system:	Integrated variable speed magnetic stirrer (not available for the 2 mm path width cell)
Temperature setting range:	10 to 70°C
Temperature control range:	15 to 60°C (for room temperature at 20°C)
Temperature setting precision:	±0.1°C (cell holder sensor)
Temperature accuracy:	With cell holder sensor: ±0.5°C (20°C to 40°C), ±1°C (other temp. range)

Option

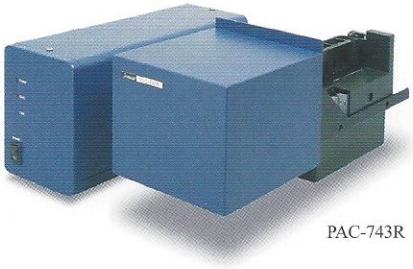
OPS-513 In-cell sensor with holder (factory option)

This is an optional sensor to monitor the temperature inside of a single sample cells

PAC-743 Automatic 6/8-position Peltier cell changer (water-cooled)

PAC-743R Automatic 6/8-position Peltier cell changer (water-cooled, thermostatted reference)

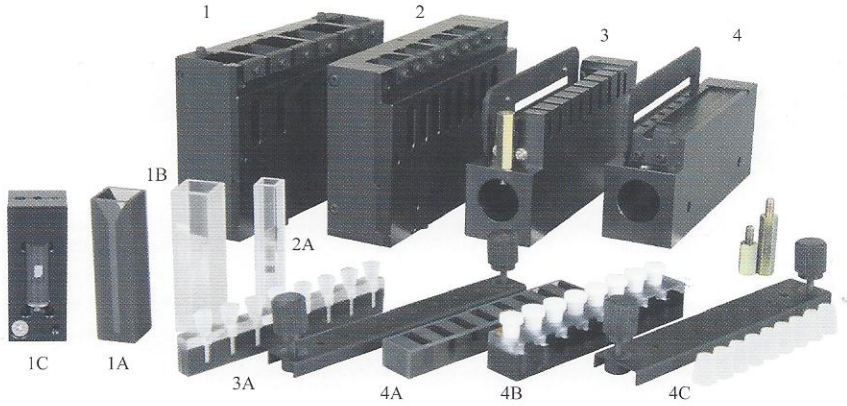
Micro cell



PAC-743R

Specifications:

Reference:	Rectangular cell 10 × 10, 4 × 10, or 2 × 10 mm, 1 pc.
Temperature control system:	Heating/cooling system utilizing Peltier effect (PAC-743: sample side only)
Heat radiating system:	Water-cooled
Temperature setting range:	-10 to 110°C
Temperature control range:	0 to 100°C (at 20°C)
Temperature setting precision:	±0.1°C
Temperature accuracy:	With cell holder sensor: ±0.5°C (20°C to 40°C), ±1°C (other temp. range)



Specifications:

Cell block (Cell and temp. sensor are optional)	#	Compatible cell	#	In-cell sensor (factory option)
6-position cell block (with integrated variable speed magnetic stirrer) for rectangular cell, 10 x 10 mm	1	Rectangular quartz cell, 2 x 10 mm, max. 6pcs.	1A	6916-H516A Sensor in cell, 1 pc. 6916-H517A Sensor in cell, 6 pcs/set
		Rectangular quartz cell, 4 x 10 mm, max. 6pcs.	-	
		Rectangular quartz cell, 10 x 10 mm, max. 6pcs.	1B	
		Capillary cell adaptor and Capillary cell, max. 6 pcs. (A sealing compound is required for using capillary cells.)	1C	
8-position cell block (with integrated variable speed magnetic stirrer) for rectangular cell, 5 x 5 mm	2	Rectangular quartz cell, 5 x 5 mm, max 8 pcs.	2A	6916-H516A Sensor in cell, 1 pc. 6916-H518A Sensor in cell, 8 pcs/set
1 mm 8-position micro cell block (Including Silicon cap x 8, Silicon cap with sensor hole x1, and cap fixture) *Stirrer function is not available.	3	8-position 1 mm micro cell, 1 mm path length, 10 µL for each position	3A	6916-H516A Sensor in cell, 1 pc. *The 8th cell position is used only to monitor cell block temperature.
10 mm 8-position micro cell block *Stirrer function is not available.	4	8-position 10 mm micro cell, 10 mm path length, 10 µL for each position, without capability for well caps	4A	N/A
		8-position 10 mm micro cell with Teflon caps, 10 mm path length, 100 µL for each position	4B	6916-H516A Sensor in cell, 1 pc. *The 8th cell position is used only to monitor cell block temperature.
		Silicon cap kit for 1103-1168, to prevent volatilization of samples at high temperatures, consisting of silicon cap x8 , Silicon cap with sensor hole x1, and cap fixture	4C	

Water circulation bath

MCB-100 Mini water circulation bath

Specifications:

Temperature control range:	10°C below ambient temperature to 40°C (IN and OUT connected)
Bath capacity:	Approx. 200 mL
Temperature sensor accuracy:	±0.2°C (at 20°C)
Cooling/heating capacity:	52 W
Dimensions:	160 (W) × 278 (H) × 225 (D) mm



Sippers, Autosampler, syringe pump and flow cell

NQF-781 Vacuum sipper
NQF-783 Vacuum sipper with long-path flow cell

A 10 mm rectangular cell holder is integrated in addition to the 10 mm flow cell, and can be easily switched.

Specifications:

	NQF-781	NQF-783
Light path length	10 mm	50 mm
Cell capacity	Approx. 50 µL	Approx. 1.4 mL
Cell material	Quartz	
Carryover	Less than 1%	
Min. sample requirement	0.7 mL with low-viscosity samples	2.4 mL with low-viscosity samples
Wavelength range	220 - 900 nm (V-730/750/760) 220 - 2200 nm (V-770) 220 - 1600 nm (V-780)	



NQF-781

NPF-782 Peristaltic sipper



NPF-782

A 10 mm rectangular cell holder is integrated in addition to the 10 mm flow cell, and can be easily switched. The sample can be recovered by reversing the 'drain' direction.

Specifications:

Light path length:	10 mm
Cell capacity:	Approx. 50 µL
Cell material:	Quartz
Carryover:	Less than 1%
Min. sample requirement:	0.7 mL with low-viscosity samples
Wavelength range:	220 - 900 nm (V-730/750/760) 220 - 2200 nm (V-770) 220 - 1600 nm (V-780)

SFC-712 Flow cell holder

Two different cell blocks are available as options, please specify.

5 mm path length flow cell block
(50 µL cell capacity)
10 mm path length flow cell block
(100 µL cell capacity)



SFC-712

LFC-713 Long path flow cell holder

Three different cell blocks are available as options, please specify.

30 mm path length flow cell block
(approx. 0.6 mL cell capacity)
50 mm path length flow cell block
(approx. 1 mL cell capacity)
100 mm path length flow cell block
(approx. 2 mL cell capacity)



LFC-713

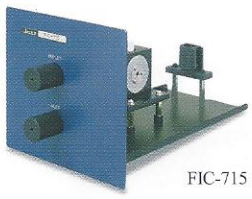
MFC-714/FIC-715 Micro flow cell holder



MFC-714

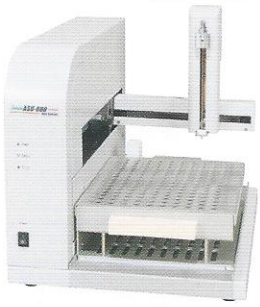
Specifications:

Tubing:	SUS (MFC-714) Teflon (FIC-715)
Light path length:	10 mm
Cell Capacity:	20 µL



FIC-715

ASU-800 Autosampler unit



ASU-800

The ASU-800 autosampler automates measurements of multiple liquid samples employing a sipper or syringe pump. Various racks are available to be used with test tubes and/or vials. The PC control software is included as standard.

Specifications:

Compatible pump:
- NQF-781 Vacuum sipper
- NQF-783 Vacuum sipper with long-path flow cell
- NPF-721 Peristaltic sipper
- ASP-849 Syringe pump

Option

	Rack	Sample	Max number of sample
SRA-811	15 mm O.D. test tube rack	10 mL	100
SRA-812	13 mm O.D. test tube rack	7 mL	100
SRA-813	12 mm O.D. test tube rack	5 mL	150
SRA-814	10 mm O.D. test tube rack	3 mL	150
SRA-816	Micro plate rack	1 mL	192
SRA-818	Vial rack	1.5 mL	120

Dust cover

This is a dust case that covers the rack part of ASU-800



AWU-820 Washing unit

This is a washing unit Specifically for the NQF-781, NQF-783 and NPF-782. The AWU-820 can automatically wash the ASU-800 autosampler system.



ASP-849 Syringe pump



ASP-849

The ASP-849 can be used in conjunction with the ASU-800 and SFC-712 flow cell holder. The syringe pump is suitable for drawing small quantities of sample.

Specifications:

Reproducibility of volume delivery:	Within ±1%
Syringe capacity:	2.5 mL (1, 5, 10 mL options)

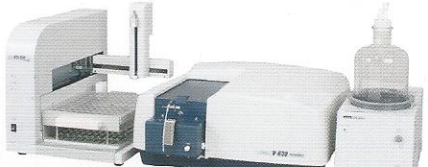
Autosampler systems for multiple samples



ASU-800 with NPF-782 peristaltic sipper



ASU-800 with ASP-849 syringe pump and SFC-712 micro flow cell



Integrating spheres

ISV-922/ISN-923/ISN-901i **Integrating sphere, 60 mm diam.**



ISV-922

Option

PSH-002 Powder sample holder
- For diffuse reflectance measurements of powder samples
- Size of sample area: 16 mm diameter
- Thickness: 0.5 - 6 mm

PSH-003 Powder sample holder
- For diffuse reflectance measurements of small amount of powder samples
- Size of sample area: 5 mm diameter
- Thickness: 0.5 - 4 mm

Specifications:

Model name	ISV-922	ISN-923	ISN-901i
Main unit	V-750/760	V-770	V-780
Inside diameter of integrating sphere	60 mm diam.		
Min. sample size (Reflectance)	20 (H) x 20 (W) x 0.5 (t) mm		
Max. sample size (Reflectance)	65 (H) x 50 (W) x 25 (t) mm		
Sample cell (Transmittance)	Rectangular cell 5, 10, 20, 30 and 50 mm path length		
Reference cell (Transmittance)	Rectangular cell 5, 10, 20 mm path length *Reference cell block is optional.		
Wavelength range	200 - 870 nm	200 - 2500 nm	200 - 1600 nm
Detector	PMT	PMT & PbS	PMT & InGaAs
Incident angle to reflection surface	0°, approx. 5°		

ILV-924/ILN-925/ILN-902i **Integrating sphere, 150 mm diam.**



ILN-925

Option

PSH-002 Powder sample holder
- For diffuse reflectance measurements of powder samples
- Size of sample area: 16 mm diameter
- Thickness: 0.5 - 6 mm

SSH-507 Solid sample holder
- For diffuse transmittance measurements of a solid sample
- Min. sample size: 20 (H) × 20 (W) × 0.5 (t) mm
- Max. sample size: 70 (H) × 30 (W) × 40 (t) mm

Specifications:

Model name	ILV-924	ILN-925	ILN-902i
Main unit	V-750/760	V-770	V-780
Inside diameter of integrating sphere	150 mm diam.		
Min. sample size (Reflectance)	20 (H) × 20 (W) × 0.5 (t) mm		
Max. sample size (Reflectance)	100 (H) × 50 (W) × 30 (t) mm		
Sample cell (Transmittance)	Rectangular cell 5, 10, 20 30, and 50 mm path length		
Reference cell (Transmittance)			
Wavelength range	220 - 850 nm	220 - 2200 nm	220 - 1600 nm
Detector	PMT	PMT & PbS	PMT & InGaAs
Incident angle to reflection surface	approx. 5°		

SIV-767/SIN-768 **Integrating sphere with stirrer**



SIN-768

Option

RLH-603 Reference-side rectangular cell holder
This cell holder is required for the reference side when performing diffuse transmittance measurements of turbid liquid samples. The 5, 10 and 20mm pathlength rectangular cells can be used with this cell holder.

Thermostatted Cell Holder
This cell holder allows measurements under temperature control by using a 10 × 10 mm rectangular cell with a temperature range of 10 to 90°C. A thermostatted water circulator is required.

Specifications:

Model name	SIV-767	SIN-768
Main unit	V-750/760	V-770
Inside diameter of integrating sphere	60 mm diam.	
Sample cell (Transmittance)	Rectangular cell 5, 10, 20 30, and 50 mm path length	
Reference cell (Transmittance)	Rectangular cell 5, 10, 20 mm path length Reference cell block is optional.	
Wavelength range	250 - 800 nm	250 - 2500 nm
Detector	PMT	PMT & PbS
Incident angle to reflection surface	approx. 5°	

HISV-728/HISN-729 **Portable integrating sphere**



HISN-729

Option

Model neme	OFV-624	OFV-625	OFN-626	OFN-627
Portable integrating sphere	HISV-728		HISN-729	
Length	1 m	2 m	1 m	2 m
Wavelength range	250 - 800 nm		250 - 2000 nm	

Specifications:

Model name	SIV-767	SIN-768
Main unit	V-750/760	V-770
Inside diameter of integrating sphere	60 mm diam.	
Window size	25 mm diam.	
Wavelength range	250 - 800 nm	250 - 2000 nm

IJV-726/IJN-727/IJN-904i **Dedicated gemstone integrating sphere**

Specifications:

Model name	IJV-726	IJN-727	IJN-904i
Main unit	V-750/760	V-770	V-780
Inside diameter of integrating sphere	60 mm diam.		
Min. sample size	2 mm diam. (Transmittance/Reflectance)		
Max. sample size (Transmittance)	10 mm diam.		
Max. sample size (Reflectance)	30 mm diam.		
Wavelength range	220 - 850 nm	220 - 2000 nm	220 - 1600 nm



IJN-727

PIV-756/PIN-757/PIN-903i **Horizontal sampling integrating sphere**

Specifications:

Model name	IJV-726	IJN-727	IJN-904i
Main unit	V-750/760	V-770	V-780
Inside diameter of integrating sphere	60 mm diam.		
Max. sample size (Reflectance)	30 x 30 x 10 (t) mm		
Reflectance measurement adaptor	20 mm diam. x 2 mm (no window required)		
Min. sample size(Transmittance)	3 mm diam.x 0.5 (t) mm		
Max. sample size (Transmittance)	50 (H) x 50 (W) x 2 (t) mm		



PIN-575

Specular reflectance measurement accessories

SLM-907/SLM-908 Specular reflectance accessory

The SLM-907 and SLM-908 accessories are designed to measure the relative reflectance of a sample using the reflected light from an aluminum-deposited plane mirror as a reference.
These accessories allow measurement of the reflectance of metal-deposited films and/or metal Plating, as well as measurement of film thickness using a film thickness analysis program.
The SLM-908 accessory can measure larger samples such as 6 inch silicon wafers.



SLM-907



SLM-908

Specifications:

Model name	SLM-907	SLM-908
Incident angle	approx. 5°	
Min. sample size	10 x 10 mm	-
Max. sample size	100 x 120 mm	150 mm diam.
Beam Port Diameter	7 mm diam. (1 mm, 2 mm diam. Options)	7 x 7 mm
Reflection Reference	Aluminum-deposited plane mirror (Standard)	
Wavelength range	250 - 1000 nm (V-730)	-
	200 - 870 nm (V-750/760) 200 - 2500 nm (V-770) 200 - 1600 nm (V-780)	
Sample chamber lid	Standard	

Option

Model neme	MSK-001	MSK-002
Sample stage with mask	2 mm diam.	4 mm diam.
Min. sample size	3 x 3 mm	5 x 5 mm
Max. sample size	50 x 50 mm	50 x 50 mm

Film holder

FLH-740/FLH-741 Film holder

The FLH-740 and FLH-741 accessories are used to measure the transmittance of solid, transparent samples such as films, plate glass, and filters.



FL H-740



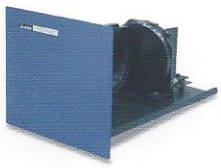
FL H-741

Specifications:

Model name	FLH-740	FLH-741
Min. sample size	15 (H) x 15 (W) x 0.5 (t) mm	5 (H) x 5 (W) x 0.5 (t) mm
Max. sample size	80 (H) x 100 (W) x 10 (t) mm	80 (H) x 100 (W) x 25 (t) mm

RSH-744 Rotary sample holder

The RSH-744 accessory can be used to measure a film type sample and rotating the sample manually. The sample can be rotated 360° around the optical axis and the inclination (tilt) of the sample versus the source beam can be varied within a range of ±50°.



RSH-744

Specifications:
Min. sample size:
10 (H) x 30 (W) x 1 (t) mm
Max. sample size:
18 (H) x 38 (W) x 2 (t) mm
Angle of rotation:
Optical axis: 360°
Perpendicular to the optical axis: ±50°

VTA-752 Film holder (variable incident angle)



VTA-752

The VTA-752 is a film holder to measure transmittance of a film type sample, changing the incident angle of the light beam. The incident angle of the source light beam can be set in 1° increments.

Specifications:
Minimum sample size: 15 (H) x 35 (W) x 1 (t) mm
Maximum sample size: 80 (H) x 70 (W) x 2 (t) mm
Range of rotation angle: ±90°

Optical fiber probe units

FAV-750/FAV-751 Optical fiber unit



The FAV-750/FAN-751 accessories, consisting of an optical fiber unit and external detector, enables the measurement of bulky samples that cannot be set in the sample compartment and/or samples that are in special environments. The light from the main instrument is introduced to the optical fiber. The light from a sample is introduced to the external detector via the optical fiber.

Specifications:

Model name	FAV-750	FAN-751
Wavelength range	250 - 800 nm	250 - 2000 nm

* Optical fiber, optical fiber ports, and external sample compartment are optional.

Option
Fiber connection port, Bundle type for FAV-750/FAN-751
Fiber connection port, Bundle type for FAP-754
Fiber connection port, FC connector type for FAV-750/FAN-751
Fiber connection port, FC connector type for FAP-754
Fiber connection port, SMA connector type for FAV-750/FAN-751
Fiber connection port, SMA connector type for FAP-754

FAP-754 Optical fiber unit



FAP-754

The FAP-754 accessory can be used for sample measurement using the internal detector of the spectrophotometer. The light from the main instrument is introduced to an optical fiber. The light from a sample is introduced to the detector of the spectrophotometer via a return optical fiber.

* Optical fiber and optical fiber ports are optional.

ELM-912 External light source interface



ELM-912

This interface is for introducing light from an external light source to the spectrophotometer, and measuring the spectrum of the external source. It can be used for the spectral/intensity evaluation of external light sources.

* For correction of the measured spectrum, a secondary reference source is also required.
* The optical fiber is optional.

Polarizer, Depolarization plate

GPH-506 Polarizer

The GPH-506 polarizer converts the source light from the instrument monochromator into linearly polarized light. The plane of polarization can be set at 0° (vertical linearly polarized light) and 90° (horizontal linearly



DPL-515 Depolarization plate

The DPL-515 depolarizer converts incident light to non-polarized light. Non-polarized light is obtained when the rotation angle is set to 45°. The applicable spectral range is from 350 to 2,500 nm.



Absolute reflectance measurement accessory

ARV-913/ARN-914/ARN-915i
Absolute reflectance measurement accessory (Synchronous type)

ARSV-916/ARSN-917/ARSN-918i
Absolute reflectance measurement accessory (Asynchronous type)

ARMV-919/ARMN-920/ARMN-921i
Automated absolute reflectance measurement accessory



ARV-913

The ARV and ARN accessories provide absolute reflectance measurements of samples by the manual, synchronous movement of the sample stage and detector. Changing the incident angle of the sample by manually moving the detector position, the absolute reflectance of the sample can be measured at varied incident angles.
The ARSV and ARSN accessories provide an asynchronous movement of the sample stage and detector, thus, the positions of the sample stage and detector can be independently varied to obtain the absolute reflectance and transmittance spectra of the sample at varied incident and detection angles. Using the optional polarizers, the polarization properties of the sample can also be examined.

The ARMV and ARMN automate the absolute reflectance measurements of specularly reflecting samples such as metal or glass samples. The detector is equipped with an integrating sphere and thus it also permits measurement of the relative reflectance of a diffusely reflecting sample. Since the angles of the sample stage and the detector can be changed independently, the absolute reflectance and transmittance of a sample can be measured with varied angles of incidence.
A software controlled polarizer is provided as standard for the examination of the polarization properties of a sample. In addition to S and P polarized lights, N polarized light that obtains the same measurement results as non-polarized light is available.



ARMV-919

Specifications:

Model name		ARV-913	ARN-914	ARN-915i	ARSV-916	ARSN-917	ARSN-918i	ARMV-919	ARMN-920	ARMN-921i
Main unit		V-750/760	V-770	V-780	V-750/760	V-770	V-780	V-750/760	V-770	V-780
Wavelength range		250 - 850 nm	250 - 2000 nm	250 - 1600 nm	250 - 850 nm	250 - 2000 nm	250 - 1600 nm	250 - 850 nm	250 - 2000 nm	250 - 1600 nm
Movement of sample stage and detector		Synchronous			Asynchronous					
Control of sample stage and detector		Manual						Automated		
Measurement mode		Absolute reflectance Relative reflectance			Absolute reflectance Relative reflectance Transmittance					
Integrating sphere		60 mm diam.								
Incidence angle		Absolute reflectance mode: 5 ° to 60° Relative reflectance mode: Vertical incidence								
		-			Transmittance mode: 0 ° to 60°					
Angle setting		2.5° step (manual)			Sample stage: 0.1° step (manual) Detector stage: 1° step (manual)			0.1° step automatic		
Sample size	Absolute reflectance mode: Min.	20 (H) x 20 (W) x 1 (t) mm						20 (H) x 20 (W) x 1 (t) mm		
	Absolute reflectance mode: Max.	70 (H) x 100 (W) x 10 (t) mm						70 (H) x 70 (W) x 10 (t) mm		
	Relative reflectance mode: Min.	20 (H) x 20 (W) x 0.5 (t) mm						20 (H) x 20 (W) x 0.5 (t) mm		
	Relative reflectance mode: Max.	70 (H) x 100 (W) x 10 (t) mm						70 (H) x 70 (W) x 10 (t) mm		
Accuracy		±1.5% at incidence angle of 6 °								
100% line flatness		Within ±1%								
Polarizer		Option						Standard		
Standard software		N/A						Absolute reflectance spectral measurement, Interval analysis		

Option

SSH-508 Solid sample holder

The SSH-508 is set on the entrance to the detector for diffuse transmittance measurements of scattering samples at a vertical (0°) incidence.

Specifications:
Minimum sample size:
30 (H) x 30 (W) x 0.5 (t) mm
Maximum sample size:
70 (H) x 80 (W) x 10 (t) mm

Wide incident angle sample holder

This sample holder is attached to the sample stage to allow an angle of incidence up to a maximum of 85°.

Specifications:
Minimum sample size:
30 (H) x 60 (W) x 1 (t) mm
(ARV/ARN)
30 (H) x 30 (W) x 1 (t) mm
(ARSV/ARSN/ARMV/ARMN)
Maximum sample size:
70 (H) x 100 (W) x 10 (t) mm
Incidence angle: 0 - 85 °

PDU-755 Phase difference measurement unit

The PDU-755 option provides the measurement of the reflectance phase difference and the transmittance phase difference. It consists of an angle selective analyzer and the VWAP-794 phase difference measurement program.

Specifications:
Wavelength range:
250 - 850 nm
(ARV-913/ARSV-916/ARMV-919)
250 - 2000 nm
(ARN-914/ARSN-917/ARMN-920)
250 - 1600 nm
(ARN-915i/ARSN-918i/ARMN-921i)
Polarization rotation angle: 0 - 90°

* The contents of this brochure are for reference and illsutrative purposes only. Information, descriptions, and specifications in this publication are subject to change without notice. JASCO assumes no responsibility and will not be liable for any errors or omissions contained herein or for incidental, consequential damages or losses in connection with the furnishing, performance or use of this material.

JASCO INTERNATIONAL CO., LTD.
11-10, Myojin-cho 1-chome, Hachioji, Tokyo 192-0046, Japan
Tel: +81-42-649-3247 Fax: +81-42-649-3518 http://www.jascoint.co.jp/english/
Australia, China, Hong Kong, India, Indonesia, Korea, Malaysia, New Zealand, Pakistan, Philippines, Russia, Singapore, Taiwan, Thailand

JASCO INCORPORATED
28600 Mary's Court, Easton, MD 21601, U.S.A
Tel: +1-800-333-5272 +1-410-822-1220 Fax: +1-410-822-7526 http://www.jascoinc.com
U.S.A., Canada, Costa Rica, Mexico, Puerto Rico, Argentina, Brazil, Chile, Colombia, Paraguay, Peru, Uruguay, Guatemala, Ecuador, Bolivia

JASCO EUROPE s.r.l.
Via Luigi Cadorna 1, 23894 Cremella (Lc), Italy
Tel: +39-039-9215811 Fax: +39-039-9215835 http://www.jasco-europe.com
JASCO Deutschland www.jasco.de, **JASCO UK** www.jasco.co.uk,
JASCO France www.jascofrance.fr, **JASCO Benelux** www.jasco.nl,
JASCO Spain www.jasco-spain.com
Italy, Germany, U.K., France, Netherlands, Belgium, Luxembourg, Spain, Sweden, Norway, Denmark, Austria, Finland, Greece, Hungary, Poland, Portugal, Romania, Switzerland, Algeria, Cyprus, Egypt, Israel, Jordan, Kuwait, Lebanon, Morocco, Saudi Arabia, South Africa, Tunisia

For more information, please contact :