

# SPECTROPHOTOMETER









### SCANNING UV VISIBLE SPECTROPHOTOMETER LDSS-100 SERIES

Labocon Scanning double beam UV Visible spectrophotometers LDSS-100 series offers measurement range of 190-1100nm at bandwidth of 1.8nm/4nm; which provides high accuracy, reproducibility and high throughput at each run.

The LDSS-100 Series suits for

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 190-1100nm

#### Bandwidth:

• 1.8nm/4nm

#### **Optical System**

- Double beam optical system
- Czerny-Turner diffraction monochromator having 1200 lines/mm grating

#### Detector

Silicon Photodiode

#### Wide measurement range with ultra-low Stray Light achieved at highest Resolution

- With its ultra-low stray light (≤0.05 %T (220nm, 340nm)) is achieved at wavelength range of 190 - 1100 nm
- Multi-wavelength pinpoint test for simultaneous testing of up to 30 wavelengths

#### Flexibility with various sample size

 A wide range of standard cuvettes can be use 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.

#### **Additional Feature**

- USB data interface with online PC software ensures powerful function and data processing capabilities
- Automatic 4-position cell holder and optional 7-position or 16-position cell holder
- Variety of optional accessories suitable for different applications including reflection sample holder, solid sample holder, water bath and auto sampler

# **Application**

Labocon LDSS-100 Series of scanning double beam UV Visible Spectrophotometer is widely used in clinical, pharmaceutical, veterinary, environmental and general quality control laboratories.





Model	LDSS-101	LDSS-101PC	
Wavelength Range	190-1100nm		
Wavelength Accuracy	±0.1nm (656.1nm D2); ±0.5nr	ກ (whole wavelength range)	
Wavelength Repeatability	±0.15	5nm	
Spectral Resolution	O.1ı	nm	
Spectral Bandwidth	1.8nm	/4nm	
Stability	±0.001A/h ai	t 500nm, 0A	
Baseline Flatness	±0.00	015A	
Photometric Range	0-200 %T; -3-3/	\; -9999-9999C	
Photometric Accuracy	±0.002A (0-0.5A); ±0.004A (0.5-1A); ±0.008A (1-2A); ±0.3% (0-100%T)		
Photometric Repeatability	±0.002A (0-0.5A); ±0.004A (0.5-1A); ±0.008A (1-2A); ±0.15% (0-100%T)		
Stray Light	≤0.05 %T (220	Onm, 340nm)	
Display	LC	ID .	
Software	None	PC with on-line software	
Overall Dimension	470x390x225mm		
Weight	20 kg		
Catalog No.	9153175164	9153176164	



### SCANNING UV VISIBLE SPECTROPHOTOMETER LSS-100 SERIES

Labocon Single beam scanning UV Visible spectrophotometers LSS-100 Series offers measurement range of 190-1100nm at fixed/variable bandwidth of 1.0, 1.8,2 and 4nm; which provides high accuracy, reproducibility and high throughput at each run.

The LSS-100 Series suits for

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 190-1100nm

#### **Bandwidth**

1.0, 1.8,2 and 4nm

#### **Optical System**

Single beam optical system with 1200 lines/mm grating

# Wide Measurement Range with Ultra-low Stray Light achieved at highest Resolution

 With its ultra-low stray light (≤0.05 %T (220nm, 360nm)) is achieved at max scan speed of around 3000nm/min

#### Flexibility with various sample size

- A wide range of standard cuvettes can be use based on the sensitivity or sample volume requirements.
- Large sample compartment to accommodate 5-100mm cuvettes with holders

#### Sophisticated and simplified Sample analysis software

 The optional 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.





#### **Additional Feature**

10mm standard cell holder

# **Application**

Labocon UV Visible Scanning Spectrophotometer LSS-100 Series is widely used in clinical, pharmaceutical, veterinary, environmental and general quality control laboratories.

Model	LSS-101	LSS-102	LSS-103	LSS-104
Wavelength Range	190-1100nm			
Wavelength Accuracy	±0.5	ōnm	±O.3nm	
Wavelength Repeatability	0.3	nm	0.2	nm
Spectral Bandwidth	4nm	2nm	1.8nm	1nm
Photometric Range		0.200%T,	-0.3-3.0A	
Photometric Accuracy		≤±0.5%T or ±0	D.003A at 1A	
Stability		±0.002A/h	at 500nm	
Stray Light	0.05%T at 220,360nm			
Light Source	Tungsten Halogen Lamp and Deuterium Lamp			amp
Baseline Flatness	±0.002A			
Display	LCD			
Overall Dimension	480x360x160mm 600x450x200mm			x200mm
Power Supply	220V 60Hz			
Weight	14	kg	20	kg
Catalog No.	9153107346	9153108346	9153109346	9153110346



### SCANNING UV VISIBLE SPECTROPHOTOMETER LSSPC-100 SERIES

Labocon Single beam scanning UV Visible spectrophotometers LSSPC-100 Series offers measurement range of 190-1100nm at fixed/variable bandwidth of 1.0, 1.8,2 and 4nm; which provides high accuracy, reproducibility and high throughput at each run.

The LSSPC-100 Series suits for

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 190-1100nm

#### **Bandwidth**

1.0, 1.8,2 and 4nm

#### **Optical System**

Single beam optical system with 1200 lines/mm grating



#### Wide Measurement Range with Ultra-low Stray Light achieved at highest Resolution

 Ultra-low stray light (≤0.05 %T (220nm, 360nm)) is achieved at max scan speed of around 3000nm/min

#### Flexibility with various sample size

- A wide range of standard cuvettes can be use based on the sensitivity or sample volume requirements.
- Large sample compartment to accommodate 5-100mm cuvettes with holders

#### Sophisticated and simplified Sample analysis software

 The optional 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.



#### **Additional Feature**

- USB data interface with online PC software ensures powerful function and data processing capabilities
- 10mm standard cell holder

# **Application**

Labocon UV Visible Single beam scanning Spectrophotometer LSSPC-100 Series is widely used in clinical, pharmaceutical, veterinary, environmental and general quality control laboratories.

Model	LSSPC-101	LSSPC-102	LSSPC-103	LSSPC-104
Wavelength Range	190-1100nm			
Wavelength Accuracy	±0.5	ōnm	±0.3	3nm
Wavelength Repeatability	0.3	nm	0.2	nm
Spectral Bandwidth	4nm	2nm	1.8nm	1nm
Photometric Range		0.200%T,	-0.3-3.0A	
Photometric Accuracy		≤±0.5%T or ±0	0.003A at 1A	
Stability		±0.002A/h	at 500nm	
Stray Light	0.05%T at 220,360nm			
Light Source	Tungsten Halogen Lamp and Deuterium Lamp			amp
Baseline Flatness	±0.002A			
Display	LCD			
Overall Dimension	480x360x160mm 600x450x200mm			x200mm
Power Supply	220V 60Hz			
Weight	14	kg	20	kg
Catalog No.	9153111346	9153112346	9153113346	9153114346



### SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER LUVS-100 SERIES

Labocon Single Beam UV Visible spectrophotometer LUVS-100 series offers the measurement range of 200-1100nm at band width of 2nm and 4nm; these systems provide the high accuracy, reproducibility and high throughput at each run.

The LUVS-100 range produces the photometric range of -0.3 to 3 A; 0-200 %T and photometric accuracy of ±0.5%T (0-100%T); which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

These systems are best suitable for following application:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

200-1100nm

#### Spectral Bandwidth

2nm and 4nm

#### Stray Light

Stray light is achieved in range of ≤0.2% -≤0.5%T at 220nm and 340nm

#### Light source

Deuterium and tungsten halogen lamp

#### 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 provides the 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. It can store up to 500 results.



#### **Additional Features**

#### For Model LUVS-101:

- · Advanced optical system
- C-T diffraction monochromator having 1200 lines/mm grating ensures high resolution, high photometric accuracy and low stray light
- Input through numeric keypad to set the host wavelength
- · Automatic wavelength setting
- Built-in SCM technology with auto 100% error-free T/A transformation
- Transmittance, absorbance and concentration function
- Large sample compartment having four position cell rack suitable for 1-10cm optical path rectangular cells
- RS232C connection interface
- · Quantitative data processing software

#### Optional Accessories:

- Halogen-Tungsten Lamp
- Deuterium Lamp
- Glass Cuvette O.5cm, 1cm, 2cm, 3cm, 5cm, 10cm
- 4-allied 5cm, 10cm cuvette rack
- Quartz cuvette 1cm, 2cm, 3cm, 5cm
- · Praseodymium-Neodymium optical filter
- Holmium oxide optical filter
- Mini printer and cable

#### For Model LUVS-102 and LUVS-103:

- Microprocessor controlled technology
- Uniquely designed optical system with holographic grating and receiver ensures excellent performance
- 1200 lines/mm holographic grating
- Manual wavelength setting
- Easy to operate and allows scalable and upgradable scanning





- · Transmittance and absorbance measurement of samples at specified wavelength
- · Quantitative analysis of samples and provides automatically built standard curve
- Can save 200 standard curve and 500 groups of data
- · Adopts stand-alone operation with linear regression equation measurement
- Latest processing technology enables convenient operation
- USB data port
- Built-in printer and anti-controlled PC software (optional)

Model	LUVS-101	LUVS-102	LUVS-103	
Wavelength Range	200-1000nm	200-1100nm		
Wavelength Accuracy	±2nm	±1r	nm	
Wavelength Repeatability	≤lnm	±0.5	ōnm	
Spectral Bandwidth	4nm	2nm,	4nm	
Stability	<0.002 A/h	±0.002 A/hr. a	at 500nm, 0 A	
Photometric Range	-0.301 to 3.000 A; O to 99999 C	-0.3 to 3 A; 0-200 %	%T; -9999 to 9999 C	
Photometric Accuracy	±0.5%	±0.5%T (0	O-100%T)	
Photometric Repeatability	≤0.2%	±0.2%T (0-100%T)		
Monochromator	Czerny Turner Diffraction Grating	Littrow Diffraction Monochromator		
Stray Light	≤0.5%	≤0.2 %T (220	nm, 340nm)	
Light Source	Deuterium	Lamp and Tungsten-Halo	ogen Lamp	
Display		LCD		
Overall Dimension	620x620x380mm	470x380	x200mm	
Power		100W		
Power Supply	240V 60Hz	Hz 90-230V		
Weight (Net/Gross)	23/25 kg	12/13.5 kg	11.5/13 kg	
Catalog No.	9153160164	9153161164	9153162164	



#### SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER -LUVS-200 SERIES

Labocon Single Beam UV Visible spectrophotometer LUVS-200 range offers the measurement range of 190-1100nm at band width of 2nm; these systems provide the high accuracy, reproducibility and high throughput at each run.

The LUVS-200 series produces the photometric range of 0.200%T, -0.3-3A and photometric accuracy of ±0.3 %T; which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

These systems are best suitable for following application:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

- Wavelength range
  - 190-1100nm
- **Spectral Bandwidth** 
  - 2nm
- Detector
  - Silicon Photodiode
- Stray Light
  - Stray light is achieved in range of ≤0.05 %T
- Light source
  - Deuterium and tungsten halogen lamp

#### 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 provides the 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. It can store up to 200 results.

#### **Additional Features**

- Provides Photometric, Quantitative, Kinetics, Wavelength scan, Multi-wavelength and DNA/Protein Test functions
- USB port and parallel port
- Inclusive of standard PC software

#### For Model LUVS-201:

- Enables building of calibration curves and further implementation of associated tests
- Can store up to 200 groups of data and 200 standard curves
- 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

#### For Model LUVS-202:

- Suspended posture optical system
- Strengthening and thickening of bottom plate ensures elimination of vibrational or transformational impact on the optical system
- 24-bit high speed and high precision A/D conversion technique improves sensitivity
- Data processing enables easier and convenient user editing
- Adopts synchronous sine institutions, high wavelength accuracy and repeatability
- Automatic wavelength setting
- Equipped with scanning software
- High, medium and low scanning speed



Model	LUVS-201	LUVS-202
Wavelength Range	190-1100nm	
Wavelength Accuracy	±lnm	±O.5nm
Wavelength Repeatability	≤O.3nm	≤0.2nm
Bandwidth	2nm	1.8nm
Stability	±O	.0001A/h at 500nm
Baseline Flatness	±0.004A	±0.0001A
Photometric Range	0.20	0%T, -0.3-3A, 0-9999C
Photometric Accuracy	±0.5 %T	±0.3 %T
Photometric Repeatability	≤0.2 %T	≤0.15 %T
Stray Light		≤0.05 %T
Light Source	Deuteriun	n & Tungsten Halogen Lamp
Display		LCD
Detector	9	Silicon Photodiode
Noise	±0.004A	±0.0005A
Overall Dimension	460x380x160mm	460x380x180mm
Power	300 W	
Power Supply	220V 61Hz	220V 62Hz
Weight	13 kg	20 kg
Catalog No.	9153163252	9153164252



### SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER -LUVS-300 SERIES

Labocon Single Beam UV Visible spectrophotometer LUVS-300 range offers the measurement range of 190-1100nm at band width of 2nm and 4nm; these systems provide the high accuracy, reproducibility and high throughput at each run.

The LUVS-300 series produces the photometric range of 0-200%T,-0.3-3.0A and photometric accuracy of ±0.5%T or ±0.004A at 1A which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

These systems are best suitable for following application:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 190-1100nm

#### **Bandwidth**

· 2nm and 4nm

#### Detector

Silicon Photodiode

#### Stray Light

Stray light is achieved in range of 0.05%-0.2% T at 220,360nm

#### Light source

Deuterium and tungsten halogen lamp

#### 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 provides the 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. It can store up to 200 results.

Model	LUVS-301	LUVS-302	LUVS-303
Wavelength Range	200-10	200-1000nm	
Bandwidth	4r	nm	2nm
Wavelength Accuracy	±2ı	nm	±0.5nm
Wavelength Repeatability	0.8nm	lnm	0.3nm
Stray Light	0.2	2%T	0.05%T at 220,360nm
Photometric Range	0-	200%T, -0.3-3.0A, 0-999	9C
Photometric Accuracy	±O.5%T or ±0	±0.5%T or ±0.003A at 1A	
Stability	±0.002A/h at 500nm	±0.002A/h at 500nm -	
Stray Light	O.2%T		0.05%T at 220,360nm
Light Source	Tungsten Halogen and Deuteriun		n Lamp
Display		LCD	
Detector	Silicon Ph	notodiode	-
Overall Dimension	440x387x180mm		470x373x187mm
Power Supply	220V 60Hz		
Weight	14 kg		
Catalog No.	9153101346	9153102346	9153103346



Model	LUVS-303PC	LUVS-304	LUVS-304PC	
Wavelength Range	190-1100nm			
Bandwidth		2nm		
Wavelength Accuracy		±0.5nm		
Wavelength Repeatability		O.3nm		
Stray Light		0.05%T at 220,360nm		
Photometric Range	0-	200%T, -0.3-3.0A, 0-999	9C	
Photometric Accuracy		±0.5%T or ±0.004A at 1A		
Stability	±0.001A/h at 500nm			
Stray Light	0.05%T at 220,360nm			
Light Source	Tungsten Halogen and Deuterium Lamp			
Display		LCD		
Overall Dimension	470x373x187mm			
Power Supply	220V 60Hz			
Weight	14 kg			
Catalog No.	9153104346	9153105346	9153106346	



### DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER LUVSD-100 SERIES

Labocon Double Beam UV Visible Spectrophotometer LUVSD-100 Series offers the measurement range of 190-1100nm at bandwidth of 1.8nm and 2nm; these systems provide the high accuracy, reproducibility and high throughput at each run.

The LUVSD-100 Series produces the photometric range of -0.3 to 3 A; 0-200 %T and photometric accuracy of ±0.2%T; which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

#### **Features**

#### Wavelength range

• 190-1100nm

#### **Spectral Bandwidth**

1.8nm and 2nm

#### Detector

Silicon Photodiode

#### Stray Light

Stray light is achieved at ≤0.03%T

#### Light source

Deuterium and tungsten halogen lamp

#### Sample size

• A wide range of standard cuvettes to be use based on the sensitivity or sample volume requirements.

#### Sophisticated and simplified sample analysis software

 The sample analysis software provides the 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 that enables results to be stored directly to a USB memory stick for easy transfer of data.





#### **Features**

- Double beam optical system having suspended posture
- Strengthening and thickening of bottom plate ensures elimination of vibrational or transformational impact on the optical system
- Optical system having high quality structural design with technological requirements and raw materials
- 24-bit high speed and high precision A/D conversion technique improves sensitivity
- Provides Photometric, Quantitative, Kinetics, Wavelength scan, Multi-wavelength and DNA/Protein Test functions
- LCD display
- Automatic wavelength setting
- Equipped with scanning software
- High, medium and low scanning speed
- Model LUVSD-102:
  - Automatically adjustable variable bandwidth 0.5/1.0/2.0/4.0/5.0nm
  - Original packaging includes imported core components
  - USB port and parallel port
  - Inclusive of standard PC software

# **Application**

Labocon Double Beam UV Visible Spectrophotometer LUVSD-100 series is widely used in following application:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation



Model	LUVSD-101	LUVSD-102	
Wavelength Range	190-1100nm		
Wavelength Accuracy	±0.1nm(D2 656	6.1NM),±0.3nm	
Wavelength Repeatability	≤0.1	nm	
Spectral Bandwidth	1.8nm	2nm	
Stability	±0.0004A	/h(500nm)	
Baseline Flatness	±0.00	D01A	
Photometric Range	O-200%T, -0.3	3A, O-9999C	
Photometric Accuracy	±0.2	2%Т	
Photometric Repeatability	≤0.15%T		
Stray Light	≤0.03%T		
Light Source	Deuterium & Tungsten Halogen Lamp		
Display	LCD		
Detector	Silicon Ph	notodiode	
Noise	±0.00	005A	
Overall Dimension	625x430x210mm		
Power	300 W		
Power Supply	220V 63Hz	220V 64Hz	
Weight	28 kg		
Catalog No.	9153165252	9153166252	



### DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER LUVSD-200 SERIES

Labocon Double Beam UV Visible Spectrophotometer LUVSD-200 Series offers the measurement range of 190-1100nm at bandwidth of 0.5, 1.0, 2.0, 4.0nm; these systems provide the high accuracy, reproducibility and high throughput at each run.

The LUVSD-200 Series range produces the photometric range of -0.3 to 3 A; 0-200 %T and photometric accuracy of ±0.3%T; which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

#### **Features**

- Wavelength range
  - 190-1100nm
- **Spectral Bandwidth** 
  - 0.5, 1.0, 2.0, 4.0nm
- **Optical System** 
  - Monochromator with 1200 lines/mm blazed holographic grating
- Detector
  - Silicon Photodiode
- **Stray Light** 
  - Stray light is achieved at ≤0.05%T at 220nm and 360nm
- Light source
  - Deuterium and tungsten halogen lamp
- Sample size
  - A wide range of standard cuvettes to be use based on the sensitivity or sample volume requirements.
- Sophisticated and simplified sample analysis software
  - The sample analysis software provides the 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 that enables results to be stored directly to a USB memory stick for easy transfer of data.



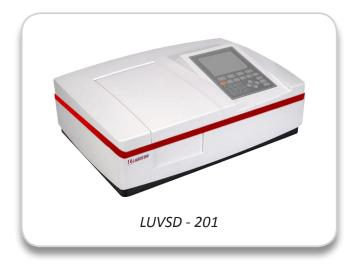
#### **Additional Features**

- Model LUVSD-201B: Adopts variable bandwidth 0.5/1.0/2.0/4.0nm
- Model LUVSD-202: Optional bandwidth 0.5/1.0/2.0/4.0nm
  - Online software up gradation via internet (for stand-alone models)
  - HP or Epson Deskjet printer to print results and graphs

### **Application**

Labocon Double Beam UV Visible Spectrophotometer LUVSD-200 series is widely used in following application:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation







Model	LUVSD-201	LUVSD-201A	LUVSD-201B	LUVSD-202
Wavelength Range	190-1100nm			
Wavelength Accuracy		±0.3nm		
Wavelength Repeatability		0.2	nm	
Spectral Bandwidth	1.8nm	lnm	0.5, 1.0, 2.0, 4.0nm	0.5, 1.0, 2.0, 4.0nm (optional)
Stability	đ	: 0.001A/h at 500nn	n	± 0.0004A/h at 500nm
Baseline Flatness		± 0.00	O1A/h	
Photometric Range	-0	-0.3-3A,0-200%T,0-9999C -0.4-4A,0		
Photometric Accuracy		±0.3%T		
Photometric Repeatability	0.2%T			
Stray Light	≤0.05%T at 220nm,360nm			
Light Source		D2 Lamp	& W Lamp	
Display		LC	D	
Detector		Silicon Ph	notodiode	
Noise	± 0.001A/h ± 0.0004A/h			± 0.0004A/h
Overall Dimension	625x430x206mm 635x440x210mm			
Power Supply	220V/50Hz 110V/60Hz			
Weight	30 kg			
Catalog No.	9153167347	9153168347	9153169347	9153170347



#### DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER LUVSD-300 SERIES

Labocon Double Beam UV Visible Spectrophotometer LUVSD-300 Series offers the measurement range of 190-1100nm at bandwidth of 0.5, 1.0, 2.0, 4.0nm; these systems provide the high accuracy, reproducibility and high throughput at each run.

The LUVSD-300 Series range produces the photometric range of -0.3 to 3 A; 0-200 %T and photometric accuracy of ±0.3%T; which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

#### **Features**

- Wavelength range
  - 190-1100nm
- **Spectral Bandwidth** 
  - 0.5, 1.0, 2.0, 4.0nm
- Stray Light
  - Stray light is achieved at ≤0.05%T at 220nm and 360nm
- Light source
  - Deuterium and tungsten halogen lamp
- Sample size
  - A wide range of standard cuvettes to be use based on the sensitivity of the sample volume requirements
  - Large sample compartment to accommodate 5-100mm cuvettes with holders

#### Sophisticated and simplified sample analysis software

- The sample analysis software provides the 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 that enables results to be stored directly to a USB memory stick for easy transfer of data.



### **Additional Features**

- Fixed or variable bandwidth
- Automatic switching between deuterium and tungsten lamp
- USB port and parallel port
- Stand-alone model have 5 inch screen
- Model LUVSD-301: Optional PC model with UV/Vis analyst software
- Model LUVSD-302: Optical system with PC software (optional)
  - · Online software up gradation via internet
  - Downloading data to PC software enables unlimited data storage
  - 10mm standard cell holder

# **Application**

Labocon Double Beam UV Visible Spectrophotometer LUVSD-300 series is widely used in following application:

For measurement of DNA, RNA and oligonucleotide and Protein

- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation





Model	LUVSD-301	LUVSD-302	
Wavelength Range	190-1100nm		
Wavelength Accuracy	±0.3	3nm	
Wavelength Repeatability	0.2	nm	
Spectral Bandwidth	1.8nm; PC model: 0.5, 1, 2, 4, 5nm	1nm	
Stability	±0.0005A/	h at 500nm	
Baseline Flatness	±0.0	001A	
Photometric Range	0.200%T,	-0.3-3.0A	
Photometric Accuracy	≤±0.3%T or ±0.002A at 1A		
Stray Light	0.05%T at 220,360nm		
Light Source	Deuterium and Tung	gsten Halogen Lamp	
Display	LC	ID .	
Software	Optional PC model with UV/Vis analyst software	Optional PC software	
Overall Dimension	600x450x200mm		
Power Supply	220V 60Hz		
Weight	22 kg		
Catalog No.	9153171346	9153172346	



#### SPLIT DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER LSUVS-100 SERIES

Labocon Split double Beam UV Visible spectrophotometers LSUVS-100 Series offers measurement range of 190-1100nm at bandwidth of 1.8 and 4nm; which delivers high accuracy, reproducibility and high throughput at each run.

#### LSUVS-100 Series best suitable for:

- Measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- Determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 190-1100nm

#### Bandwidth

• 1.8nm/4nm

#### **Optical System**

- Split Double beam optical system
- Czerny-Turner diffraction monochromator having 1200 lines/mm grating

#### Wide measurement range with ultra-low Stray Light achieved at highest Resolution

 With its ultra-low stray light (≤0.05 %T (220nm, 340nm)) is achieved at wavelength range of 190 - 1100 nm

#### Flexibility with various sample size

· A wide range of standard cuvettes can be use 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



### **Additional Feature**

- USB data interface with online PC software ensures powerful function and data processing capabilities
- Automatic 4-position cell holder and optional 7-position or 16-position cell holder
- Variety of optional accessories suitable for different applications including reflection sample holder, solid sample holder, water bath and auto sampler

# **Application**

Labocon Split double Beam UV Visible Spectrophotometer LSUVS-100 Series is widely used for analytical testing in various fields like biochemistry, organic chemistry, pharmaceutical analysis, food testing, medicine and health, environmental protection, life sciences, etc.





Model	LSUVS-101	LSUVS-101PC	
Wavelength Range	190-1100nm		
Wavelength Accuracy	±0.5	ōnm	
Wavelength Repeatability	±0.2	2nm	
Spectral Bandwidth	1.8nm or 4n	nm optional	
Stability	±0.001A/h ai	t 500nm, 0A	
Baseline Flatness	±0.0	02A	
Photometric Range	0-200 %T; -0.3-3.0	OA; -9999-9999C	
Photometric Accuracy	±0.002A (0-0.5A); ±0.004A (0.5-1A); ±0.008A (1-2A); ±0.3% (0-100%T)		
Photometric Repeatability	±0.002A (0-0.5A); ±0.004A (0.5-1A); ±0.008A (1-2A); ±0.15% (0-100%T)		
Stray Light	≤0.05 %T (220	Onm, 340nm)	
Display	LC	ID .	
Noise	±0.001A		
Software	None PC with on-line softwa		
Overall Dimension	470x390x225mm		
Weight	20 kg		
Catalog No.	9153173164	9153174164	



#### SINGLE BEAM VISIBLE SPECTROPHOTOMETERS 100 SERIES

Labocon Single Beam Visible spectrophotometers LVS-100 Series offers measurement range of 320-1100nm at bandwidth of 4nm; which provides high accuracy, reproducibility and high throughput at each run.

These LVS-100 Series are inbuilt with highly durable tungsten halogen lamp, which best suitable for:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation.

#### **Features**

#### Wavelength range

• 320-1100nm

#### **Optical System**

 High quality Czerny Turner Diffraction Grating monochromator ensures high resolution, high photometric accuracy and low stray light

#### Bandwidth

4nm

#### Detector

Silicon Photodiode

#### Measurement Range with ultra-low Stray Light

 With its ultra-low stray light (≤0.2 %T (220nm, 340nm)) 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.

#### **Additional Features**

#### Model LVS-101

- · Advanced optical system
- Built-in SCM technology with auto 100% error-free T/A transformation
- · Large sample compartment having four position cell rack suitable for 1-10cm optical path rectangular cells
- RS232C connection interface
- Quantitative data processing software

#### Optional Accessories:

- Halogen-Tungsten Lamp
- Glass Cuvette O.5cm, 1cm, 2cm, 3cm, 5cm, 10cm
- 4-allied 5cm, 10cm cuvette rack
- Praseodymium-Neodymium optical filter

#### Model LVS-102 and LVS-103:

Manual wavelength setting

#### Model LVS-103:

- Microprocessor controlled technology
- Can save 200 standard curve and 500 groups of data
- USB data port
- Built-in printer and anti-controlled PC software (optional)





# **Application**

Labocon Visible Spectrophotometer LVS-100 Series is widely used in educational institutes, medical and health clinics, biochemistry field, chemical engineering, environmental protection, food industry, pharmaceutical industry, quality control departments, etc.



Model	LVS-101	LVS-102	LVS-103	
Wavelength Range	330-1000nm	320-1000nm	320-1100nm	
Wavelength Accuracy		±2nm		
Wavelength Repeatability	≤lnm	±1r	ım	
Spectral Bandwidth		4nm		
Stability	-	±0.002 A/hr a	at 500nm, 0 A	
Photometric Range	-0.301 to 3.000 A; O to 9999 C	-0.3 to 3 A; 0-200 %	%T; -9999 to 9999 C	
Photometric Accuracy	±1%	±0.5%T (0	D-100%T)	
Photometric Repeatability	≤0.5%	±0.2%T (0-100%T)		
Monochromator	Czerny Turner Diffraction Grating	Littrow Diffraction Monochromator		
Stray Light	≤O.5% (T)	≤0.2 %T (220nm, 340nm)		
Light Source	Tungsten-Halogen Lamp	-		
Display	LCD	LED	LCD	
Overall Dimension	570x470x310mm	470x380x200mm		
Power Supply	240V 60Hz	-	-	
Weight (Net/Gross)	9/11 kg	14 kg		
Catalog No.	9141144164	9141145164	9141146164	



#### SINGLE BEAM VISIBLE SPECTROPHOTOMETER LVS-200 SERIES

Labocon Single Beam Visible spectrophotometers LVS-200 Series offers measurement range of 320-1100nm at bandwidth of 2 and 4nm; which provides high accuracy, reproducibility and high throughput at each run.

These LVS-200 Series are inbuilt with highly durable tungsten halogen lamp, which best suitable for:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 320-1100nm

#### **Optical System**

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

#### **Bandwidth**

2 & 4nm

#### Detector

Silicon Photodiode

#### Measurement Range with ultra-low Stray Light

With its ultra-low stray light ≤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.



#### Additional Features

- Large sample compartment to accommodate 5-100mm cuvettes with holders
- Pre-aligned design allows convenient changing of lamps
- USB port and parallel port
- PC software (optional)

#### For Model LVS-201:

- Equipped with tungsten halogen lamp
- Automatic zero adjustment
- Easy to use and operate
- Two-points method measures concentration of unknown samples

#### For Model LVS-202:

- Can display 50 groups of data
- Automatic switching between deuterium and tungsten lamp
- Automatic wavelength calibration and dark current setting
- Data can be restored in case of power failure
- 10mm cell holder (optional)

#### For Model LVS-203, LVS-204, LVS-203PC, LVS-204PC:

- Electric circuit design ensures low stray light
- Can store up to 200 results
- Equipped with Tungsten lamp
- Model LVS-203PC, LVS-204PC: Optical system with PC software

# **Application**

Labocon Visible Spectrophotometer LVS-200 Series is widely used in educational institutes, medical and health clinics, biochemistry field, chemical engineering, environmental protection, food industry, pharmaceutical industry, quality control departments, etc.







Model	LVS-201	LVS-202	LVS-203
Wavelength Range	325-10	325-1000nm	
Wavelength Accuracy	±1r	nm	±0.8nm
Wavelength Repeatability	0.5nm		0.3nm
Spectral Bandwidth	4nm		2nm
Stability	± 0.002A/h at 500nm		
Baseline Flatness	None	None	±0.002A/h
Photometric Range	-0.3-3A,0-200%T		-0.3-3A,0-200%T,0- 9999C
Photometric Accuracy	±0.5%T		±0.3%T
Photometric Repeatability	O.3%T		O.2%T
Photometric Mode	T, A, C, F		
Stray Light	≤O.3%T		≤0.05%T
Display	LED LC		D .
Detector	Silicon Photodiode		
Overall Dimension	420x280x180mm		460x360x225mm
Power	300W		
Power Supply	AC 85-250V		110-220V 50-60Hz
Weight	8 kg	10kg	18 kg
Catalog No.	9141147347	9141148347	9141149348



Model	LVS-204	LVS-203PC	LVS-204PC
Wavelength Range	320-1100nm		
Wavelength Accuracy	±0.5nm	±0.8nm	±0.5nm
Wavelength Repeatability	0.2nm	O.3nm	0.2nm
Spectral Bandwidth	2nm		
Stability	± 0.002A/h at 500nm		
Baseline Flatness	±0.0015A/h	±0.002A/h	±0.0015A/h
Photometric Range	-0.3-3A,0-200%T,0-9999C		
Photometric Accuracy	±0.3%T		
Photometric Repeatability	O.2%T		
Photometric Mode	T, A, C, F		
Stray Light	≤0.05%T		
Display	LCD		
Detector	Silicon Photodiode		
Overall Dimension	460x360x225mm		
Power	300W		
Power Supply	110-220V 50-60Hz		
Weight	18 kg		
Catalog No.	9141150347	9141151347	9141152347



#### SINGLE BEAM VISIBLE SPECTROPHOTOMETER LVS-300 SERIES

Labocon Single Beam Visible spectrophotometers LVS-300 Series offers measurement range of 320-1100nm at bandwidth of 2 and 4nm; which provides high accuracy, reproducibility and high throughput at each run.

These LVS-300 Series are inbuilt with highly durable tungsten halogen lamp, which best suitable for:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation

#### **Features**

#### Wavelength range

• 320-1100nm

#### **Optical System**

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

#### **Bandwidth**

• 284nm

#### Detector

Silicon Photodiode

#### Measurement Range with ultra-low Stray Light

With its ultra-low stray light ≤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.

#### **Additional Features**

- LCD display
- Large sample compartment to accommodate 5-100mm cuvettes with holders
- USB port and parallel port
- PC software (optional)
- For Model LVS-301:
  - Manually set wavelength
  - Automatic zero adjustment



- Can store up to 200 results
- Automatic switching between deuterium and tungsten lamp
- · Automatic wavelength setting
- Data can be restored in case of power failure

#### Model LVS-302:

- Can display 50 groups of data along with standard curve and curve equation
- Equipped with 22 membrane keyboard
- Provides Photometric, Quantitative, Kinetics, Wavelength scan, Multi-wavelength and DNA/ Protein Test functions
- Model LVS-303PC, LVS-304PC: Optical system with PC software

# **Application**

Labocon Visible Spectrophotometer LVS-300 Series is widely used in educational institutes, medical and health clinics, biochemistry field, chemical engineering, environmental protection, food industry, pharmaceutical industry, quality control departments, etc.







Model	LVS-301	LVS-302	LVS-303
Wavelength Range	325-1000nm		320-1100nm
Wavelength Accuracy	±2nm		±0.5nm
Wavelength Repeatability	1nm	0.8nm	O.3nm
Bandwidth	4nm		2nm
Stability	±0.004A/h at 500nm	±0.002A/h at 500nm	±0.001A/h at 500nm
Baseline Flatness	-	-	-
Photometric Range	0.200%T, -0.3-3A, 0-1999C	0.200%T, -0.3-3.0A, 0-9999C	
Photometric Accuracy	±0.5%T or ±0.004A at 1A	±0.5%T or ±0.003A at 1A	±0.5%T or ±0.004A at 1A
Stray Light	O.2%T		0.05%T at 360nm
Light Source	Tungsten Halogen Lamp		
Display	LCD		
Detector	Silicon Photodiode		-
Overall Dimension	440x387x180mm		470x373x187mm
Power Supply	85-265V 50/60Hz	220V 60Hz	
Weight	8 kg	12 kg	
Catalog No.	9141153346	9141154346	9141155346



Model	LVS-304	LVS-303PC	LVS-304PC
Wavelength Range	320-1100nm		
Wavelength Accuracy	±0.5nm		
Wavelength Repeatability	O.3nm		
Bandwidth	2nm		
Stability	±0.001A/h at 500nm		
Photometric Range	0.200%T, -0.3-3.0A, 0-9999C		
Photometric Accuracy	±0.5%T or ±0.004A at 1A		
Stray Light	0.05%T at 360nm		
Light Source	Tungsten Halogen Lamp		
Display	LCD		
Overall Dimension	470x373x187mm		
Power Supply	220V 60Hz		
Weight	12 kg		
Catalog No.	9141156346 9141157346 9141158346		



#### SINGLE BEAM VISIBLE SPECTROPHOTOMETER LVS-401 SERIES

Labocon Single Beam Visible spectrophotometers LVS-401 offers measurement range of 320-1100nm at bandwidth of 2nm; which provides high accuracy, reproducibility and high throughput at each run.

This LVS-401 is inbuilt with highly durable tungsten halogen lamp, which best suitable for:

- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal to be use in petrochemical labs as they are solvent resistant such as Naphthalene in aviation.

#### **Features**

#### Wavelength range

• 320-1100nm

#### **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 ≤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.



#### Additional Features

- 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

# **Application**

Labocon Visible Spectrophotometer LVS-401 is widely used in educational institutes, medical and health clinics, biochemistry field, chemical engineering, environmental protection, food industry, pharmaceutical industry, quality control departments, etc.





Model	LVS-401	
Wavelength Range	320-1100nm	
Wavelength Accuracy	±0.5nm	
Wavelength Repeatability	≤0.2nm	
Bandwidth	2nm	
Stability	±0.0001A/h at 500nm	
Baseline Flatness	±0.0001A/h	
Photometric Range	0.200%T, -0.3-3A, 0-9999C	
Photometric Accuracy	±0.3 %T	
Photometric Repeatability	≤O.15 %T	
Stray Light	≤0.05 %T	
Light Source	Tungsten Halogen Lamp	
Display	LCD	
Detector	Silicon Photodiode	
Noise	±0.0005A	
Overall Dimension	460x380x180mm	
Power	300 W	
Power Supply	220V 60Hz	
Weight	ght 15 kg	
Catalog No.	9141159252	



#### FLUORESCENCE SPECTROPHOTOMETER LFS-100

The premium range of Fluorescence Spectrophotometer LFS-100 series from Labocon; offer unmatched reliability and productivity at wavelength range of 250-700nm.

Highly durable Xenon lamp offers higher signal to noise ratio as well as it can also drastically reduce the photo bleaching which actually increases the intactness of sample to produce high accuracy results.

The Data Collection and Analysis software offer a comprehensive solution for fast data collection and analysis such as scan, time drive, and ratio Data Collection directly from the application menu, which delivers maximum flexibility with better productivity

Our Fluorescence Spectrophotometer give you the low cost of ownership by offering an exceptionally long lifetime of 2.8 billion flashes and the lamp typically will be remain active up to next 10 years.

#### **Features**

Wavelength range: 250-700nm

Sensitivity: S/N≥150

- Wavelength accuracy: Offer wavelength accuracy at ±1nm at spectral bandwidth of 10nm
- Unparalleled detection Limit: With 150 Watts Xenon lamp, it offer higher signal to noise ratio, which provide better capabilities for trace sample measurement.
- Highly reliable optical performance: The 1200 lines/mm Czerny Turner Diffraction Grating for the highest sensitivity, accuracy and reproducibility
- Drastically reduced photobleaching of samples: Unlike conventional light sources, the improved Xenon lamp minimizes photobleaching of samples, which maintains the integrity of the sample; hence delivers accurate and uncompromised results.
- Easy software Interface: Data Collection and Analysis software offers a comprehensive solution for data collection and analysis such as scan, time drive, and ratio Data Collection directly from the applications menu.
- Outstanding durability and reliability: It gives you the low cost of ownership by offering an exceptionally long lifetime of 2.8 billion flashes and the lamp typically will be remain active up to next 10 years which will save your money.

#### Additional Features

- Model LFS-101 and LFS-102:
  - Eight stage adjustable sensitivity, real time display of fluorescence reading with concentration print out



- RS232 interface
- Standard Accessories: Power cord, fuse, 10mm quartz fluorescence cuvette
- **Optional Accessories:** 
  - 360-650nm interference optical filter
  - 10mm quartz fluorescence cuvette
  - Data processing software
  - Printer cable
  - Serial interface printer

#### Model LFS-103:

- Adjustable 10 stages can be chosen for emission spectrum scanning inclusive of high speed low S/N scanning and precise scanning
- Standard Accessories: 365nm pre-assembled filter, software package, power cable, USB cable, fuse, 10mm quartz fluorescence sample cell
- **Optional Accessories:** 
  - 200-700nm interference optical filter
  - 10mm quartz fluorescence cell
  - Printer cable
  - Serial interface printer

# **Application**

The Labocon Fluorescence Spectrophotometer's widest ranges are ideally suited for life science research such as cell-biology, immunology, enzymology and protein analysis







Model	LFS-101	LFS-102	LFS-103
Excitation Optical Filter	Interference optional filter of central wave- length at 365nm, option- al central wavelength of 365nm, 420nm, 475nm, 525nm	Interference optional filter of central wave- length at 365nm, option- al central wavelength of 365nm, 405nm, 470nm, 515nm	Interference optional filter of central wavelength at 365nm, optional interference filter of 25mm diameter of wavelength range 250-700nm
Excitation Wavelength Range	360-600nm		250-700nm
Emission Wavelength Range	360-650nm		200-900nm
Wavelength Accuracy	±2nm		±lnm
Wavelength Repeatabil- ity	≤lnm		≤0.5nm
Spectral Bandwidth	10nm		
Light Source	LED		Xenon Lamp
Monochromator	Czerny Turner Diffraction Grating		
Linearity	≤±3.0%		R ≥ 0.995
Stability	-	-	Better than 1.5% per 10min
Response Time	<del></del>		0.1-4 sec
Overall Dimension	450x420x280 mm		380x440x240mm
Power	40 W		190 W
Power Supply	220V 50Hz		
Weight (Net/Gross)	9/15 kg		14 kg
Catalog No.	9426141164	9426142164	9426143164



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