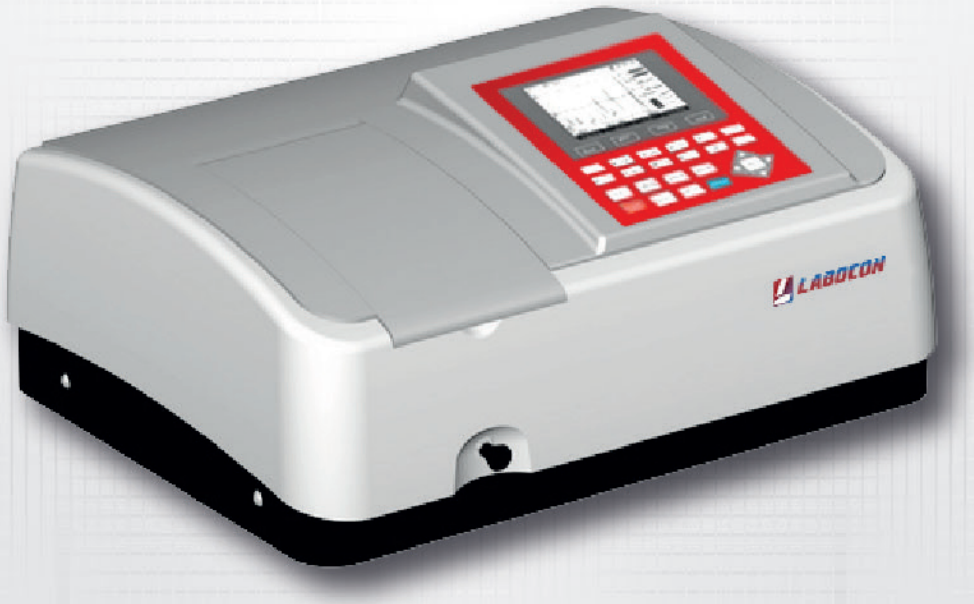
LABOCON

# UV VISIBLE SPECTROPHOTOMETER

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NOTE: The color of the actual product may differ from the color pictured in this catalog due to printing limitation.

# 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,

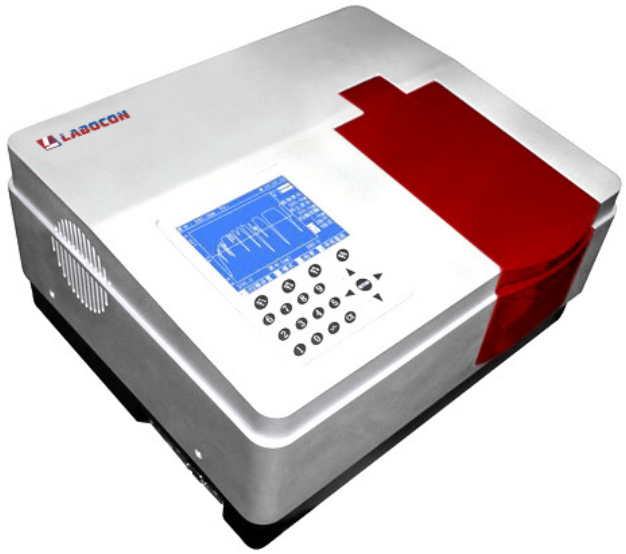
data collection, storage, export, and reporting. With additional feature of an easy access USB port available in the unit, which enables results to be stored directly to a USB memory stick for easy transfer of data.

## 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.




*LDSS - 101*

## Specification

| Model | LDSS-101 | LDSS-101PC |
|---|---|---|
| Wavelength Range | 190-1100nm | |
| Wavelength Accuracy | ±0.1nm (656.1nm D2); ±0.5nm (whole wavelength range) | |
| Wavelength Repeatability | ±0.15nm | |
| Spectral Resolution | 0.1nm | |
| Spectral Bandwidth | 1.8nm/4nm | |
| Stability | ±0.001A/h at 500nm, 0A | |
| Baseline Flatness | ±0.0015A | |
| Photometric Range | 0-200 %T; -3-3A; -9999-9999C | |
| Photometric Accuracy | ±0.002A (0-0.5A);<br>±0.004A (0.5-1A);<br>±0.008A (1-2A);<br>±0.3% (0-100%T) | |
| Photometric Repeatability | ±0.002A (0-0.5A);<br>±0.004A (0.5-1A);<br>±0.008A (1-2A);<br>±0.15% (0-100%T) | |
| Stray Light | ≤0.05 %T (220nm, 340nm) | |
| Display | LCD | |
| Software | None | PC with on-line software |
| Overall Dimension | 470x390x225mm | |
| Weight | 20 kg | |
| Catalog No. | 9153175164 | 9153176164 |

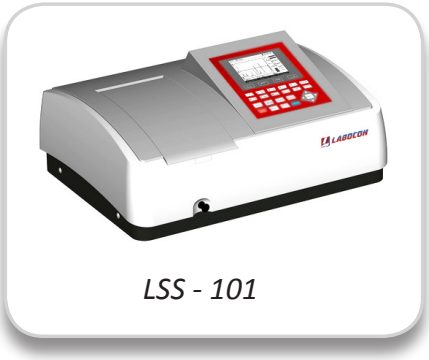
# SCANNING UV VISIBLE SPECTROPHOTOMETER LSS-100 SERIES

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




*LSS - 101*

- **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.

## Specification

| Model | LSS-101 | LSS-102 | LSS-103 | LSS-104 |
|---|---|---|---|---|
| Wavelength Range | 190-1100nm | | | |
| Wavelength Accuracy | ±0.5nm | | ±0.3nm | |
| Wavelength Repeatability | 0.3nm | | 0.2nm | |
| Spectral Bandwidth | 4nm | 2nm | 1.8nm | 1nm |
| Photometric Range | 0.200%T, -0.3-3.0A | | | |
| Photometric Accuracy | ≤±0.5%T or ±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 | | | |
| Baseline Flatness | ±0.002A | | | |
| Display | LCD | | | |
| Overall Dimension | 480x360x160mm | | 600x450x200mm | |
| 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

*LSSPC - 101*

- **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.

## Specification

| Model | LSSPC-101 | LSSPC-102 | LSSPC-103 | LSSPC-104 |
|---|---|---|---|---|
| Wavelength Range | 190-1100nm | | | |
| Wavelength Accuracy | ±0.5nm | | ±0.3nm | |
| Wavelength Repeatability | 0.3nm | | 0.2nm | |
| Spectral Bandwidth | 4nm | 2nm | 1.8nm | 1nm |
| Photometric Range | 0.200%T, -0.3-3.0A | | | |
| Photometric Accuracy | ≤±0.5%T or ±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 | | | |
| Baseline Flatness | ±0.002A | | | |
| Display | LCD | | | |
| Overall Dimension | 480x360x160mm | | 600x450x200mm | |
| 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:

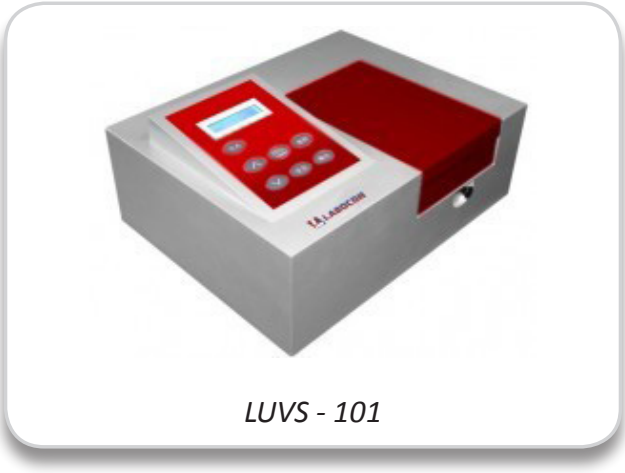
- For measurement of DNA, RNA and oligonucleotide and Protein
- Proteins can be quantitated by BCA, Biuret, Bradford, Direct UV and Lowry
- The OD of bacterial cell culture solutions can be measured to optimize harvest times
- For the determination of metal and organic non-metal analytes in water
- Ideal 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 and LUVS-102:**
  - 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)



*LUVS - 101*

## Specification

| Model | LUVS-101 | LUVS-102 |
|---|---|---|
| Wavelength Range | 200-1100nm | |
| Wavelength Accuracy | ±1nm | |
| Wavelength Repeatability | ±0.5nm | |
| Spectral Bandwidth | 2nm, 4nm | |
| Stability | ±0.002 A/hr. at 500nm, 0 A | |
| Photometric Range | -0.3 to 3 A; 0-200 %T; -9999 to 9999 C | |
| Photometric Accuracy | ±0.5%T (0-100%T) | |
| Photometric Repeatability | ±0.2%T (0-100%T) | |
| Monochromator | Littrow Diffraction Monochromator | |
| Stray Light | ≤0.2 %T (220nm, 340nm) | |
| Light Source | Deuterium Lamp and Tungsten-Halogen Lamp | |
| Display | LCD | |
| Overall Dimension | 470x380x200mm | |
| Power | 100W | |
| Power Supply | 90-230V | |
| Weight (Net/Gross) | 12/13.5 kg | 11.5/13 kg |
| Catalog No. | 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.

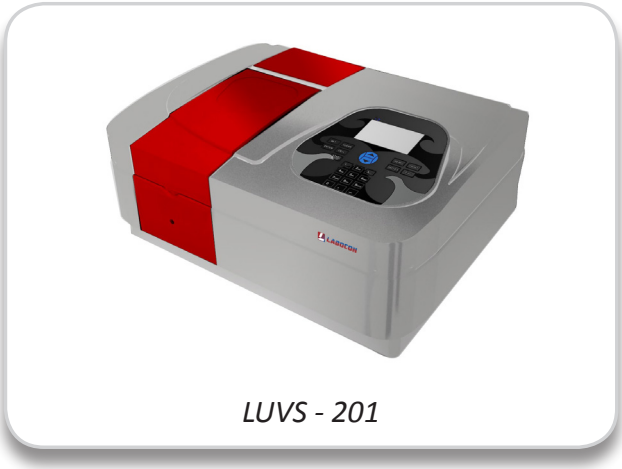
The LUVS-200 series produces the photometric range of 0.200%T, -0.3-3A and photometric accuracy of ±0.3 %T; which is ideally suitable for quantitative determination of different assays in nucleic acid, proteins, toxicological assays and optical density measurement.

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



*LUVS - 201*

- **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

## Specification

| Model | LUVS-201 | LUVS-202 |
|---|---|---|
| Wavelength Range | 190-1100nm | |
| Wavelength Accuracy | ±1nm | ±0.5nm |
| Wavelength Repeatability | ≤0.3nm | ≤0.2nm |
| Bandwidth | 2nm | 1.8nm |
| Stability | ±0.0001A/h at 500nm | |
| Baseline Flatness | ±0.004A | ±0.0001A |
| 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 |
| Stray Light | ≤0.05 %T | |
| Light Source | Deuterium & Tungsten Halogen Lamp | |
| Display | LCD | |
| Detector | 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.

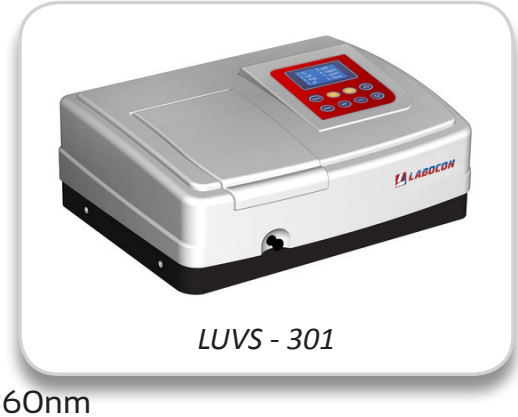
These systems are best suitable for following application:

- 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.




*LUVS - 301*

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.

## Specification

| Model | LUVS-301 | LUVS-302 | LUVS-303 |
|---|---|---|---|
| Wavelength Range | 200-1000nm | | 190-1100nm |
| Bandwidth | 4nm | | 2nm |
| Wavelength Accuracy | ±2nm | | ±0.5nm |
| Wavelength Repeatability | 0.8nm | 1nm | 0.3nm |
| Stray Light | 0.2%T | | 0.05%T at 220,360nm |
| Photometric Range | 0-200%T, -0.3-3.0A, 0-9999C | | |
| Photometric Accuracy | ±0.5%T or ±0.003A at 1A | | ±0.5%T or ±0.004A at 1A |
| Stability | ±0.002A/h at 500nm | - | ±0.001A/h at 500nm |
| Stray Light | 0.2%T | | 0.05%T at 220,360nm |
| Light Source | Tungsten Halogen and Deuterium Lamp | | |
| Display | LCD | | |
| Detector | Silicon Photodiode | | - |
| 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 | 0.3nm | | |
| Stray Light | 0.05%T at 220,360nm | | |
| Photometric Range | 0-200%T, -0.3-3.0A, 0-9999C | | |
| 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 |

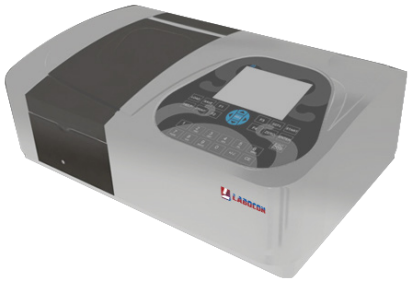
# DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER LUVSD-100 SERIES

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



*LUVSD - 102*

- **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

## Specification

| Model | LUVSD-101 | LUVSD-102 |
|---|---|---|
| Wavelength Range | 190-1100nm | |
| Wavelength Accuracy | ±0.1nm(D2 656.1NM),±0.3nm | |
| Wavelength Repeatability | ≤0.1nm | |
| Spectral Bandwidth | 1.8nm | 2nm |
| Stability | ±0.0004A/h(500nm) | |
| Baseline Flatness | ±0.0001A | |
| Photometric Range | 0-200%T, -0.3--3A, 0-9999C | |
| Photometric Accuracy | ±0.2%T | |
| Photometric Repeatability | ≤0.15%T | |
| Stray Light | ≤0.03%T | |
| Light Source | Deuterium & Tungsten Halogen Lamp | |
| Display | LCD | |
| Detector | Silicon Photodiode | |
| Noise | ±0.0005A | |
| 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.

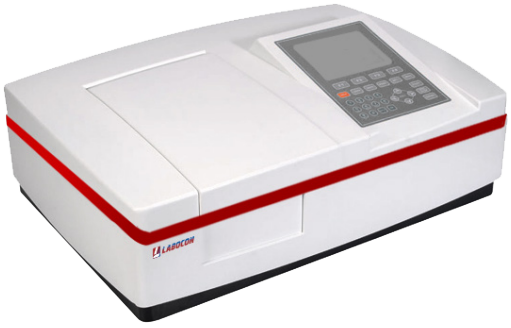
## Additional Features

- **Model LUVSD-201ß:** 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

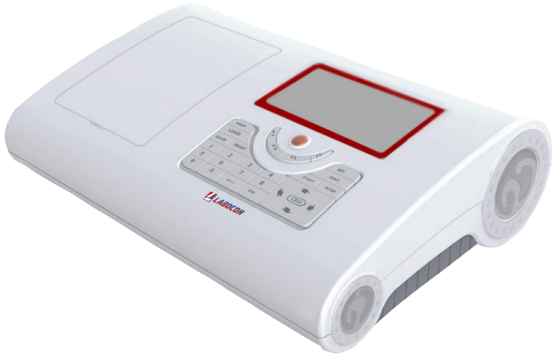
## Application

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



*LUVSD - 201*



*LUVSD - 202*

## Specification

| Model | LUVSD-201 | LUVSD-201A | LUVSD-201B | LUVSD-202 |
|---|---|---|---|---|
| Wavelength Range | 190-1100nm | | | |
| Wavelength Accuracy | ±0.3nm | | | |
| Wavelength Repeatability | 0.2nm | | | |
| Spectral Bandwidth | 1.8nm | 1nm | 0.5, 1.0, 2.0, 4.0nm | 0.5, 1.0, 2.0, 4.0nm (optional) |
| Stability | ± 0.001A/h at 500nm | | | ± 0.0004A/h at 500nm |
| Baseline Flatness | ± 0.001A/h | | | |
| Photometric Range | -0.3-3A,0-200%T,0-9999C | | | -0.4-4A,0-200%T,0-9999C |
| 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 | LCD | | | |
| Detector | Silicon Photodiode | | | |
| Noise | ± 0.001A/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

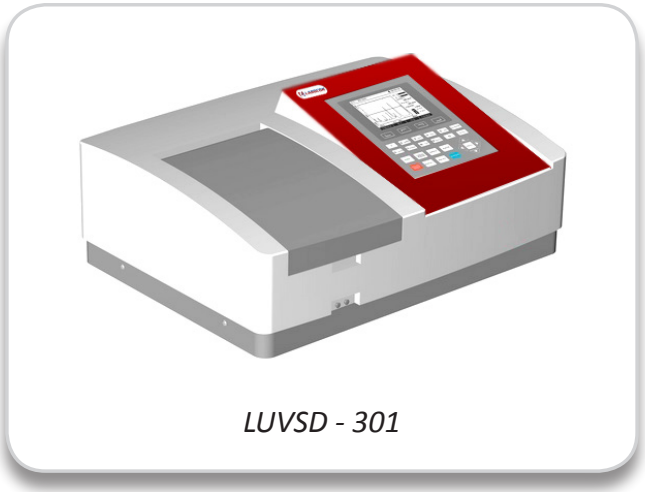
- Fixed or variable bandwidth
- Automatic switching between deuterium and tungsten lamp
- USB port and parallel port
- Stand-alone model have 5 inch screen
- **Model LUVSD-301:** Optional PC model with UV/Vis analyst software
- **Model LUVSD-302:** Optical system with PC software (optional)
  - Online 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



*LUVSD - 301*

## Specification

| Model | LUVSD-301 | LUVSD-302 |
|---|---|---|
| Wavelength Range | 190-1100nm | |
| Wavelength Accuracy | ±0.3nm | |
| Wavelength Repeatability | 0.2nm | |
| Spectral Bandwidth | 1.8nm;<br>PC model: 0.5, 1, 2, 4, 5nm | 1nm |
| Stability | ±0.0005A/h at 500nm | |
| Baseline Flatness | ±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 Tungsten Halogen Lamp | |
| Display | LCD | |
| 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

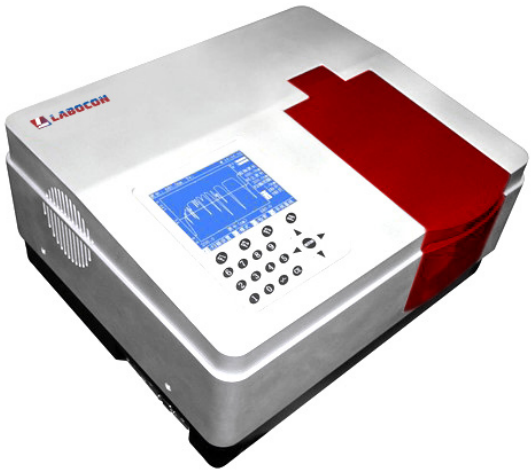
- **Wavelength range**
  - 190-1100nm
- **Bandwidth**
  - 1.8nm/4nm
- **Optical System**
  - Split Double beam optical system
  - Czerny-Turner diffraction monochromator having 1200 lines/mm grating
- **Wide measurement range with ultra-low Stray Light achieved at highest Resolution**
  - With its ultra-low 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.




*LSUVS - 101*

## Specification

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

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