

Range of μ P Colorimeters

Ideal Clinical Instruments for Blood & Chemical Analysis



VSI-401



VSI-402



VSI-403



Features

VSI-401 Auto Colorimeter

Auto Shutter	Auto Zeroing Facility
Highly Accurate & Stable	Range 400 to 700 nm
Transmission and Absorbance Modes	Soft Touch Membrane keys

VSI-402 μ P Lab Analyser

Highly Accurate & Stable	Range 400 to 700 nm
Sample Volume 1 ml.	Soft Touch Membrane Keys

VSI-403 μ P Haemoglobin Meter

Direct Display in Hb. Units	1 ml. Sample Volume
Highly Stable & Easy to Operate	Storage of Factor in Memory

VSI-404 Balanced Cell Photo Colorimeter

< 4.0 ml. Sample Volume	Highly Accurate & Easy to Operate
Range 0 to 1000 KLETT Units	Blue, Green & Red Filters

Auto Colorimeter

Microprocessor Auto Colorimeter (VSI-401) is a compact and easy to operate instrument for Photo Colorimeter analysis of any concentration. The output is available on 16x2 lines Alpha Numeric LCD display in terms of %Transmission (%T) & Absorbance (Abs.). The use of microcontroller has made it extremely versatile and state-of-the-art instrument.

The instrument operates at wavelength between 400 to 700 nm range. The use of high standard wide range glass filters covering 400 to 700 nm in the monochromator gives extremely good results. The filter setting is controlled by a rotating disc having 8 filters. An automatic shutter is provided to stop the light reaching the sensor, when test tube is not inserted in the tube holder. This increases the life of sensor tremendously.

Technical Specifications

Range	400nm to 700nm
Filters	8 Standard Glass Filters
Accuracy	±0.02 O.D./Abs.
Minimum Volume	1 ml.
Stability/Repeatability	±0.01 O.D./Abs.
Detector	Photo Diode
Shutter	Automatic
Light Source	6.8V, 0.3 Amp. Tungsten Lamp
Display	16 Characters x 2 Lines Alpha Numeric LCD Display
Readout/Output	%T : 000-100% & ABS : 0.00-1.99
Warm Up Time	5 Minutes
Power Supply	230V ± 10%, 50Hz AC
STANDARD ACCESSORIES	Glass Test Tubes - 5 Nos., Spare Lamp and Instruction Manual.

µP Lab Analyser

Microprocessor Lab Analyser (VSI-402) is a compact and easy to operate instrument for Photo Colorimeter analysis of any concentration. The output is available on a 16 x 2 lines alphanumeric backlit LCD display in terms of % Transmission (%T), Absorbance (Abs.) and Concentration (Conc.). The use of microcontroller has made it extremely versatile and accurate instrument. It has in-built memory to retain three concentrations even after power loss.

The use of high class standard wide range glass filters covering 400 to 700 nm give extremely good results. The filter setting is controlled by a rotating disc having 8 filters. An automatic shutter is provided to stop the light reaching the photocell, when test tube is not inserted in the tube holder. This increases the life of photocell tremendously.

Technical Specifications

Display Modes	%T, ABS and 3 Concentration Modes C1, C2, C3
Display	16 Characters x 2 Lines Alpha Numeric LCD Display
Zero Adjustment	Automatic (Without Knob Rotation)
Accuracy	± 0.02 O.D./Abs.
Stability	± 0.02 O.D./Abs. per Hour
Light Source	6.8 Volt, 0.3 Amp. Tungsten Lamp
Sample Volume	1 ml. Minimum
Memory	In-built Memory to Retain Three Concentrations even after power loss
Shutter	Automatic
Amplifier	Micro Controller Based
Power Supply	230V ± 10%, 50 Hz AC
STANDARD ACCESSORIES	Glass Test Tubes - 5 Nos., Spare Lamp and Instruction Manual.

µP Haemoglobin Meter

Microprocessor Haemoglobin Meter (VSI-403) is used to determine the haemoglobin concentration in the blood sample. The measurement of haemoglobin concentration is carried out at wavelength of 530 nm. Using state-of-the-art LED technology the green light produced is projected through the sample and measured by sensitive photodiode. The measurements are made using cyanmethemoglobin method used throughout the world.

Haemoglobin is an iron-containing protein found in the red blood cells. It enables the red cells to carry oxygen from lungs to the rest of the body and carry carbon dioxide back. The haemoglobin level indicates the blood's oxygen-carrying capacity and can play a major role in the early diagnosis of many illnesses such as thalassemia, sickle cell anemia, leukemia, malaria and hook worm, etc.

Technical Specifications

Measuring Methods	Cyanmethemoglobin
Measuring Range	0-40 gm/dl of Hb
Dilution Ratio	1:25l
Sample Volume	1 ml. Minimum
Display	16 Character x 2 Lines Alpha Numeric LCD Display
Wavelength	530 nm
Keyboard	5 Keys, Soft Touch Membrane Type
Zero Setting	Automatic
Calibration	Automatic
Detector	Highly Sensitive Silicon Photodiode
Power Supply	230V ± 10%, 50Hz AC
STANDARD ACCESSORIES	Glass Test Tubes - 5 Nos. & Instruction Manual

Balanced Cell Photo Colorimeter

Balanced Cell Photo Colorimeter (VSI-404) measure the absorbance of any solution in the Range of 0-1000 KLETT units. **This scale is proportional to the Concentration of the solution under test.** The output is available on 3½ Digit seven segment LED Display. It is very easy to operate and trouble-free instrument. Concentration of the sample can be directly measured with reference to standard solution. This instrument is ideally suitable for all Soil Testing Lab, Fertilizer Plants, etc.

Technical Specifications

Scale	0 -1000 Scale (Absorbance Scale)
Display	3½ Digit Seven Segment LED Display
Light Sources	6.3V, 300 mA.
Potentiometric Accuracy	± 1% F.S.
Test Tubes	Standard Size
Sample Quantity	Less than 4 ml.
Filters	Blue (440 nm), Green (540 nm) & Red (660 nm) All Fixed on a Rotating Disc
Amplifier Circuit	Solid State With ICs
Power Supply	230V ± 10%, 50Hz AC
STANDARD ACCESSORIES	Matched Test Tubes & Operation Manual

Designs & Specifications are subject to change due to continuous development.

Manufactured By :

VSI ELECTRONICS PVT. LTD.

(An ISO 9001 : 2008 Certified Company)

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