

COLORIMETERS 113 and 114 are designed for use in various colorimetric analysis in fields such as biochemistry, agriculture, veterinary, dyestuffs and pharmaceuticals. They are easy to operate, accurate and reliable.

The colorimeters are operated by passing white light sequentially through an optical colour filter, a fixed opening, and a test-tube containing an unknown solution, whose concentration needs to be determined. The transmitted light from the sample is then detected by a photocell and displayed. The display is calibrated directly in optical density. The power supply is stabilized against voltage fluctuations using electronic regulators. The instruments operate on 230 volts, 50 Hz AC mains supply. The electronic components are easily accessible for better serviceability.

MICROPROCESSOR BASED COLORIMETER 116 is a virtual mini semi auto analyzer. Easy to use, and accurate. This colorimeter uses sealed narrow band filters to cover the full visible spectrum and a long life silicon photocell. The display is microprocessor based and can store a factor for calculation of concentration. Stored factor is retained in memory even after power off.

The instrument has a 3 digit display and 4 ranges : Percentage Transmission (T), Optical Density (OD) and 2 ranges for Concentration C1 and C2. **It has an automatic Zero setting function** with a keyboard switch to set 0.00 OD or 100% T.

SPECIFICATIONS

113 / 114

Light Source : Long Life, Broad Spectrum LED covering full visible range

Detector : Sealed, high sensitivity Silicon Photocell.

Display : 3-Digit digital display calibrated in optical density only

Resolution : 0.01 in O.D. or Abs

Power : 230V AC $\pm 10\%$, 50Hz

Weight : 1.5 kg. each

Accessories : 4 nos. flat bottom test- tubes

116

Light Source : Long Life, Broad Spectrum LED covering full visible range

Detector : Sealed, high sensitivity Silicon Photocell.

Display : 3 digit Digital display

Mode : %T, Abs. (O.D.) & 2 ranges for Concentration C1 and C2

Range : %T : 0 to 130 (with a normally used range of 0 to 100)

Abs. : -0.10 to 1.99

Concentration C1 : 0 to 99.9

Concentration C2 : 0 to 999

Power : 230V AC $\pm 10\%$, 50 Hz

Weight : 1.5 kg

Accessories : 4 nos. flat bottom test tubes

FILTERS

Salient Features :

- Small convenient sample size of 1 ml only
- Long Life Broad Spectrum LED light Source
- Very few controls makes for ease of operation
- Compact space saving design
- Wavelength : 400 to 700 nm selected by filters mounted on a turret
- Light Source : 6 V LED

Type		113	114	116
Sr. No.	Colour	Wavelength (nm)	Wavelength (nm)	Wavelength (nm)
1	Violet	420	420	430
2	Blue	440	490	470
3	Blue/Green	490	-	490
4	Green	520	540	520
5	Yellow /Green	540	-	550
6	Yellow	570	590	580
7	Orange	600	-	610
8	Red	720	650	700

Photoelectric Colorimeter

