L LABORATORY
P PROCESS
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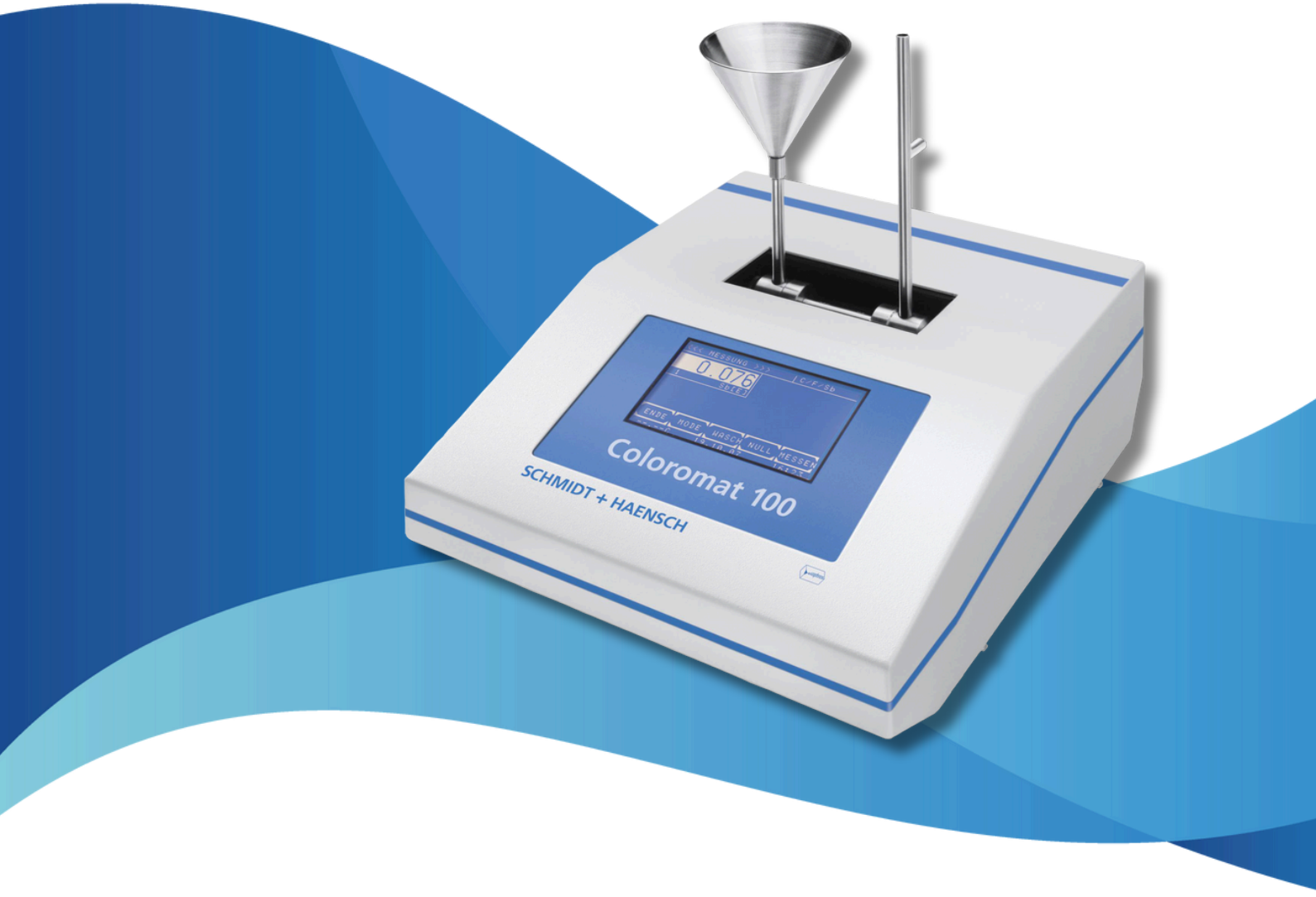
Coloromat® 100

Single Beam Spectrophotometer

Our spectrophotometer for easy and reliable color measurement of liquids according to ICUMSA standards



SPECIFICATIONS	Coloromat® 100 – V2
Optics	Single beam photometer
Wavelength range	340 – 900 nm*
Pre-installed filters	560, 420, 720 nm
FWHM	420 nm = 4 nm** 720 and 560 nm = 7 nm**
Wavelength selection	Via touch screen
Light source	LED
Measuring range	0 – 16,000 ICUMSA Units (IU)
Measuring accuracy	± 0.020 extinction at 420 nm ± 0.010 extinction at 560 nm ± 0.010 extinction at 720 nm ± 0.020 extinction at optional filters
Resolution extinction	0.001
Resolution ICUMSA	1 IU
Accuracy IU	± 10 % for colors < 20 IU ± 5 % for colors > 20 IU
Operator Interface	Touch screen for direct functions and alphanumerical inputs
Data presentation	Graphic display
Data output	RS232C & USB
Operating temperature	10 – 40°C
Languages	English and German / Indonesian / Russian / Spanish

* For WL < 500 nm and > 700 nm, additional LED's may be required to ensure measurement accuracy and stability
** This very narrow half-value width enables high measurement accuracy as well as very good repeatability

- Objective and repeatable measurements
- 3 fixed wavelengths 340, 420 and 720 nm
- Very narrow band width
- 6 optional wavelengths (in the range of 340 - 900 nm)*
- Automatic wavelength setting
- Polarimeter cells up to 100 mm usable
- Single or flow through measurements
- Remote control via PC
- Data output to PC or to directly connected printer, also via USB
- Up to 250 methods programmable
- GLP / GMP conform documentation
- Largly maintenanee free

Applications

- Color measurement of liquid crystal sugar (ICUMSA)
- Color index determination of soft drinks and wine
- Determination of the color of extracts (coffee a.o.)
- Color index determination via APHA-number
- Color measurement of beer and wort (EBC color number)
- Bicromate measurements
- Multi standard methods
- Simple forward extinction measurements
- Monitoring of color changes as a function of time
- Enzymatic determination e.g. NAD(P)- and NAD(P)H-methods

Digital single beam photometer for the determination of liquid color

The **Coloromat® 100** allows easy measurement of transmission, extinction and colour units at the recommended wavelengths in the range between 340 and 900 nm. For wavelengths below 500 nm and above 750 nm, additional LED's may be required to ensure measurement accuracy and stability.

The **touch screen** is used for soft key functions and alphanumerical inputs which allow easy handling for example batch name, user etc.. The wavelengths are selected via the touch screen. **Three wavelengths are pre-installed** as standards, optional the Coloromat® 100 can be equipped with **six** further **customized wavelengths**. This opens a wide range of applications.

Due to the generous dimensions of the sample chamber the use of polarimeter flow through tubes up to 100 mm as standard cuvettes allows easy filling and a high through-put. A 100 mm tube provides ten times better measurement accuracy and resolution compared to a 10 mm cuvette.

The sample compartment is open to the top and the bottom avoi- ding spillage to enter the unit. Due to its unique optical design the Coloromat® is not affected by stray light.

The Coloromat® 100 is equipped with a **continuous measuring mode** with free configurable sampling rate for monitoring color changes in product streams as a function of time.

The general operating software contained in the FLASH MEMORY can be updated by PC (data file downloaded from Internet) and has a capacity for 250 pre-programmed tests. Up to 230 tests can be stored in the RAM. The import of data by touch screen or PC are possible.

Due to the use of LED's for illumination, the Coloromat® 100 – V2 is largely maintenance free.

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