

CHROMA

# Chroma Colorimeters

Ciba Corning has a long and distinguished history in the field of colorimetry. This expertise has culminated in a stylish new range of instrumentation - the Chroma series.



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## Chroma 252

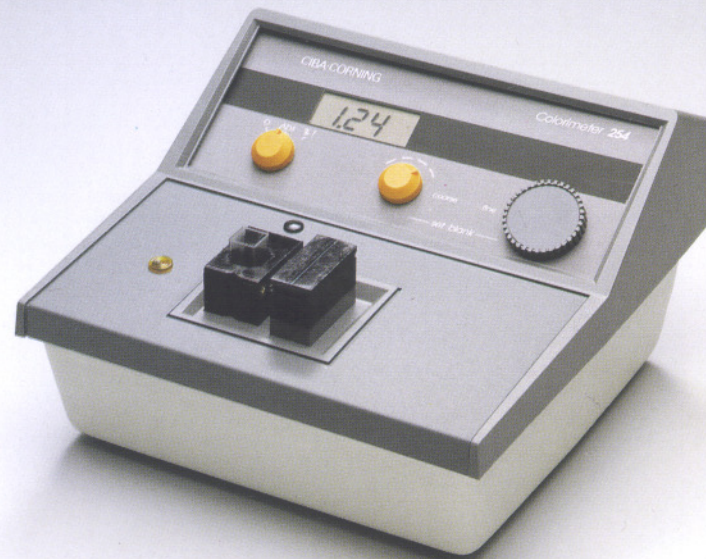


Chroma 252 is a traditional analogue-readout instrument which is ideal for educational purposes. In common with the 254 and 257 wavelength selection is by drop-in gelatin or interference filters. Highly stable, solid state electronics ensure a high level of accuracy. Reproducibility every time is to within  $\pm 1\%$  T when using the same sampling system.

The 252 is extremely versatile being capable of accepting a wide variety of sample systems – from test tubes to pour in/suck out cells. And no cell cover is needed because stray light cannot affect the result.

With battery or mains operation the Chroma 252 is a truly portable and, with thousands already installed, well proven colorimeter.

## Chroma 254



Chroma 254 is an inexpensive colorimeter with clear digital display. This instrument is designed for simple and rapid operation. Just plug in, set zero and begin measurements. Resolution of 0.01 is provided across the full 0–2 absorbance units range, with transmission easily selected by the flick of a switch.

In addition to the benefit of portability this versatile instrument's application range is enhanced by a recorder output. Coupling with the chart recorder accessory makes monitoring of results over time simplicity itself.



# Chroma 257



Chroma 257 is the last word in electronic sophistication built into stylish architecture. A powerful microprocessor coupled with clear touch panel controls simplifies even the most complex application. Automatic zero and full three decimal place resolution in absorbance allows highly accurate work. These values can be converted directly into concentration units by calibrating on a known standard or factor. Finally the results can be rapidly transferred via an RS232 data output to the printer accessory or computer for further manipulation.

The Chroma 257, in conjunction with the water jacketed cuvette, makes an ideal colorimeter for clinical applications. A wide selection of Gilford clinical chemistry reagent kits can be used on this instrument. Details of these are available on request.

## Specifications

	252	254	257
Display	Analogue	2½ digit LCD	3½ digit LCD
Wavelength Range	← 400 - 720 nm →		
Wavelength Selection	← Drop-in Filters (see ordering information) →		
Bandpass	← Gelatin Filters 40 nm; Interference Filters 10 nm (Average) →		
Modes	Absorbance, Transmission	Absorbance, Transmission	Abs., Transn, Concentration
Mode Selection	Dual Scale Meter	Switch	Touch Panel
Absorbance Range	0.0 to 1.0	0.00 to 1.99	0.000 to 1.999
Absorbance Resolution	0.01	0.01	0.001
Transmission Range	0-100%	0-100%	0-100%
Transmission Resolution	1%	1%	0.1%
Concentration	—	—	By Factor or Known Standard
Stability	← Less than ±0.005A in any 15 min period →		
Warm Up	← 15 minutes →		
Photometric Reproducibility	← ±1%T using same cuvette or test tube →		
Light Source	← Pre-focused tungsten lamp →		
Detector	← Silicon Photodiode →		
Recorder Output	—	Yes	Yes
RS232 Output	—	—	Yes
Size and Weight	← 218L × 230W × 188H (mm); 2.2 kg →		
Power Requirements	← 90 to 127V or 198 to 264V or 12V DC Battery →		

## Technical Support

Ciba Corning customers benefit from a complete after-sales support package. A technical "Guide to Colorimetry" booklet and wallchart are available on request. The booklet first outlines the principles of this important technique and then goes on to detail the more practical aspects of routine analysis.

Should existing literature not cover a particular measurement requirement free advice and, where appropriate, actual method development can be undertaken. Enquiries should be directed to the Applications Specialist at our Halstead office.



## Accessories and Consumables

### Filters

An extensive range, consisting of both gelatin (sealed in glass) and interference filters, is provided to cover the range 400-720 nm. The inexpensive gelatin filters have a bandpass of approximately 40 nm, with the interference being more specific at 10 nm. All have been carefully selected to cater for the majority of industrial and clinical colorimetric applications. See the booklet 'A Guide to Colorimetric Analysis' for further information.

### Printer

The 40 column thermal printer can be employed to provide a permanent record of results (257 only). It is supplied complete with inter-connection lead for immediate operation.

### Cuvettes

In addition to standard 10mm plastic and glass cuvettes a selection of special application variants are available. The pour in/suck out model is ideal for repetitive QA procedures while the flow through cell can be attached to on-line processes. For temperature-sensitive reactions, including certain clinical tests, choose the water jacketed cuvette. Volumes down to 250  $\mu$ l can be measured using the small sample model.

### Chart Recorder

The Chroma 254 and 257 can be linked directly to this high quality chart recorder thus providing information on trends. Use in conjunction with the flow through cell for true hands-off operation.

## Ordering Information

475622	Chroma 252 Colorimeter
475623	Chroma 254 Colorimeter
475624	Chroma 257 Colorimeter

Please state voltage/frequency requirement and order appropriate filters for immediate operation.

### Filters

#### Gelatin

25215001J	430nm
25216001E	470nm
25217001P	490nm
25218001L	520nm
25219001H	540nm
25220001F	580nm
25221001A	600nm
25222001M	710nm
25226001L	Set as above
25231001J	410nm

#### Interference

471889	405nm (M257 only)
471890	510nm
471891	546nm
471892	660nm
471893	680nm
471894	720nm

### Accessories

473 596	Printer (M257 only)
471881	Chart Recorder
471882	Battery Lead

See price list for full details of our extensive range of cuvettes, test tubes and holders

# CIBA-CORNING

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