

# Lovibond<sup>®</sup> Colour Measurement Tintometer<sup>®</sup> Group



## PFXi-195/7

Colour Measurement for Sugar Solutions, Syrups & Honey



- Integrated RCMSi Technology for Remote Calibration
- Automatic and Non-subjective Colour Measurement
- Consistent Data Compliant with International Standards
- Very Rugged, Chemically Resistant, Steel Construction

Part Number: 1371957

### Integrated RCMSi Technology for Remote Calibration

The PFXi series of spectrophotometric colorimeters introduces a unique concept in liquid colour control: RCMSi technology (Remote Calibration & Maintenance Service via internet). You can now benefit from the capability for remote calibration and servicing via the internet - eliminating any costs and time delays associated with servicing and guaranteeing compliance with standards.

[Watch the RCMSi video](#) to see how easy the procedure is.

### Automatic and Non-subjective Colour Measurement

The PFXi range provides absolute results. Automatic instruments communicate in clear terms, accurately and reliably with no opportunity for human error or misjudgement.

### Consistent Data Compliant with International Standards

The PFXi range automatically measures colour and displays results directly, either according to the traditional grading scales that have been widely adopted as industry standards for colour assessment and control, or in terms of internationally recognised CIE values and spectral data.

### Very Rugged, Chemically Resistant, Steel Construction

The robust steel construction enables you to use the PFXi even in the harshest of environments.

### Easy Maintenance with Removable Sample Chamber

The instruments include a robust steel sample chamber which is easily removed so you can clean it or replace it should spillage occur.

### Extensive and Flexible Choice of Colour Scales

You can choose from a selection of over 20 different, internationally recognised scales in a variety of combinations.

### Remote Upgrade Facility

Uniquely, however, you do not need to make the choice of scales at point of purchase. The PFXi instruments are upgradeable in the field - so you can add a scale at a later date.

### Calculation and Description of "Off-Hue" Status

This is a useful facility that enables you to reveal whether the sample colour is characteristic of the selected scale. Where appropriate, it includes a description of hue difference (eg. redder, greener), relative saturation (stronger or weaker) and an off-hue factor (a relative measure of the distance away in colour space of the sample colour from the "true" colour scale).

### Supplied with Colour Control Software for Data Analysis

The software allows you to generate spectral and CIE diagrams as well as analyse spectral data. It also permits direct control of the instrument from the computer.

## Conformance Standard, Cells and Spare Bulb Included

For regular conformance checking, certified colour reference standards are also available for routine calibration and verification of test data. Conformance filters are supplied with a Certificate of Conformity - giving you the assurance of their colour values and confirmation that they were manufactured under the control of The Tintometer Ltd's ISO 9001 quality system.

## Output Conforming to GLP Including Date, Time, Sample & User ID

The adaptable software and design allow you to configure the PFXi-195 to your requirements. You can set the display language, program the instrument to only display the scales of interest and restrict access to the menu system.

## Accommodates a Wide Range of Sample Cells and Tubes

As well as standard colorimetry cells, the PFXi-195 can be used with a range of tubes and standards, flow-through and disposable spectrophotometer cells.

## Extensive range of accessories

A thermal printer, sample chamber, additional cells, replacement lamps and conformance filters represent some of the additional accessories you can obtain for the PFXi-195.

Note: When dealing with materials such as fats and waxes whose temperature needs to be maintained at a constant temperature +10°C above the "Cloud Point" of the material, the PFXi-880, -950 & -995 series should be considered. These are available with an additional critical feature, an optional integrated heater unit.

## Industry

Chemical Industry | Food and Beverage Industry | Industries Others | Oil and Gas | Pharmaceutical Industry

## Application

Sugar Solutions, Syrups and Honey

## PFXi-195/7

The PFXi series of spectrophotometric colorimeters introduces a unique concept in liquid colour control: RCMSi technology. You can benefit from the capability for remote calibration and servicing via the internet - saving the cost and time associated with servicing and guaranteeing compliance with standards.

The PFXi range is supplied with a full range of colour scales for specific markets including, but not limited to, Petroleum, Edible Oils, Pharmaceuticals, Brewing and Honey. Users can upgrade scales remotely at any time.

Note: When dealing with materials such as fats and waxes whose temperature needs to be maintained at a constant temperature +10°C above the "Cloud Point" of the material, the PFXi-880, -950 & -995 series should be considered. These are available with an additional critical feature, an optional integrated heater unit.

## Technical Data

|                                 |  |
|---------------------------------|--|
| <b>Applicable Standard</b>      | 3. Ber. Int. Fruit Juice 1961<br>50 FR 15861<br>ASTM E308<br>Honey Regulations CRC c.287 |
| <b>Colour Type</b>              | Transparent  |
| <b>Display</b>                  | 240 x 128, back-lit graphic display, (white on blue)                                     |
| <b>Path Length</b>              | 0.1 - 50 mm  |
| <b>Measuring Geometries</b>     | 0° - 180° Transmission   |
| <b>Interfaces</b>               | USB<br>RS 232<br>Ethernet  |
| <b>Detector</b>                 | blue enhanced photodiode   |
| <b>Internal Storage</b>         | 100,000+ Messungen   |
| <b>Power Supply</b>             | Universal (90 - 240 VAC), via external power supply                                      |
| <b>Measuring Principle</b>      | 9 interference filters   |
| <b>Measurement Time</b>         | less than 30 seconds   |
| <b>Sample Chamber</b>           | max 50mm cells   |
| <b>Keypad</b>                   | 23 key tactile membrane keypad; washable polyester with audible feedback                 |
| <b>Instrument Housing</b>       | Fabricated steel with tough, textured paint finish                                       |
| <b>Spectral Range</b>           | 420 - 710 nm   |
| <b>Bandwidth</b>                | 10 nm  |
| <b>Repeatability</b>            | ±0.0004 (CIE xy Chromaticity) on measurements of de-ionised water                        |
| <b>Baseline Calibration</b>     | Single key press; fully automated  |
| <b>Illuminants</b>              | CIE Illuminant A<br>CIE Illuminant B<br>CIE Illuminant C<br>CIE Illuminant D65           |
| <b>Portability</b>              | Benchtop   |
| <b>Observer</b>                 | 2°, 10°  |
| <b>Compliance</b>               | CE<br>RoHS<br>WEEE   |
| <b>Languages User Interface</b> | English, German, French, Italian, Portuguese, Spanish, Russian, Chinese, Japanese        |
| <b>Dimensions</b>               | 435 x 170 x 195 mm   |
| <b>Weight</b>                   | 6.8 kg   |

## Delivery Scope

- PFXi Series Instrument
- External Power Supply
- Set of 3 Power Leads (UK, European and United States)
- USB and LAN Cable
- Quick Start Guide
- CD ROM (Containing Windows® Control Software and Manuals)
- RCMSi Starter Pack
- Certificate of Conformity
- Accessory Box with 5 Volt Halogen Lamp, Conformance Filter, 1 x W600/OG/10 Cell, 1 x W600/OG/50 Cell

## Accessories

| Title   | Part Number |
|---|-------------|
| Holder for standard spectrophotometer cells (12.5 mm width) | 131907      |
| Adapter for 10.65 mm tubes                                  | 132800      |
| Adapter for 33 mm tubes                                     | 132810      |
| Dark sample cell for CIE values, 1 mm path length           | 132820      |
| Replacement Sample Chamber                                  | 133830      |
| RCMSi Certified Calibration Pack - Full                     | 134410      |
| RCMSi Certified Calibration Pack - Conformance              | 134420      |
| RCMSi Certified Calibration Pack - Starter                  | 134430      |
| PFXi IQ/OQ Documentation                                    | 137680      |
| Flow through control software                               | 137690      |
| PFXi Thermal Printer  | 137891      |
| PFXi Lamp 5V  | 138180      |
| Tube, 10.65 mm diameter                                     | 352290      |
| Tube, 33 mm diameter for ASTM Color                         | 352300      |
| Flow through cell, 50 mm path length                        | 658010      |
| Flow through cell, 10 mm path length                        | 658020      |

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