

Lovibond® Colour Measurement Tintometer® Group



TR 500 Spectrophotometer (4 mm Aperture)

Ergonomisch reflectiemeetapparaat met dubbel diafragma: 10mm/8mm & 5mm/4mm



- Intuïtieve, geïntegreerde en op symbolen gebaseerde software
- Maakt het mogelijk om het zicht van grote of kleine oppervlakken te meten en zo gemakkelijk uitwisselbaar te maken.
- Gratis, PC-gebaseerde OnShade-software voor grafische en statistische procescontrole
- Fluorescerende materialen kunnen gemeten worden met UV In en UV Out.

Bestelnr.: 403041

Handheld and Portable

Weighing only 600 grams, the TR 500 is the perfect lightweight portable spectrophotometer. It's compact and ergonomic design offers easy one-handed operation, helping to prevent operator fatigue and enabling more measurements per hour. Offering the possibility of 5000 measurements with 8 hours battery life enables the TR 500 to be used anywhere on site for a prolonged period of time.

Accuracy

Giving accurate and repeatable results is what the TR 500 does best. The on board camera based locator, enables the user to position the instrument accurately on the chosen sample with minimal contact. This feature dramatically minimize the chances of geometric metamerism.

Aperture Options

Choosing the correct aperture size for your surface is extremely important for accurate measurement. This is why the TR 500 has three aperture options available in either 8mm, 4mm or 1x3mm. This choice of customised aperture helps to ensure the instrument is perfect for your measurement needs.

Calibration

The calibration board supplied with every TR 500 incorporates a white tile and black calibration plate. This allows minimum and maximum readings to be checked every 24 hours.

FREE Software

As standard, the TR 500 comes with a FREE PC software package. The OnShade software allows for a detailed data analysis which can then be shared or printed via the optional micro printer accessory.

Suitable for Multiple Applications

The versatility of the TR 500 means its suitable for multiple applications and has the ability to report CIE Lab, XYZ, Yxy, LCh, CIE LUV, Hunter Lab colour spaces, $\Delta E^*L^*a^*b^*$, $\Delta E^*C^*h^\circ$, ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*00 , ΔE Hunter Colour Difference Formulas; and can be set to D65, A, C, D50, D55, D75, F2, F7 & F11 illuminants. In addition, the TR 500 can report a wide selection of other Colorimetric Indexes: WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), TI (ASTM, E313, CIE/ISO), Metamerism Index (MI), Colour stain, Colour Fastness, Colour Strength and Opacity. This data can be seen as either Spectral Value/Graph, Colorimetric Value, Colour Difference Value/ Graph, PASS/FAIL Result, Colour Offset or Samples Chromaticity values.

Industrie

Chemische industrie | Farmaceutische industrie | Olie-industrie | Overige industrieën | Voedingsmiddelen- en drankenindustrie

Applikation

Deklagen | Huishoudelijke producten | Kunststoffen | Textiel

TR 500 Spectrophotometer (4 mm Aperture)

Een ergonomische, flexibele reflectiespectrofotometer met eenvoudig te selecteren diafragma's van 10mm/8mm & 5mm/4mm. Touchscreentechnologie met intuïtieve pictogrammen die gebruikersspecifieke instellingen mogelijk maken en u begeleiden door het meetproces. Een op camera's gebaseerde geïntegreerde locator en zwart-wit kalibratieplaten zorgen te allen tijde voor nauwkeurige metingen en resultaten. Meertalige ondersteuning voor internationaal gebruik.

Technische gegevens

Applicable Standard	ASTM 313 ASTM D1925 ASTM E308
Colour Type	Opaque
Optical Geometry	Reflect: di: 8°, de: 8° (diffused illumination, 8 degree viewing angle)
Integrating Sphere Size	48 mm
Spectrophotometric Mode	Concave Grating
Sensor	256 image Element Double Array CMOS Image Sensor
Display	3.5 inch TFT colour LCD, Capacitive Touch Screen
Interfaces	USB
Golflengte-interval	10 nm
Measurement Mode	Single Measurement, Average Measurement
extern geheugen	2000 Standards : 20000 Samples
Location Method	Camera View Finder Locating
Measured Reflectance Range	0 - 200 %
Meetperiode	2.6 s
Measuring Aperture	Dual Aperture: 10mm/8mm & 5mm/4mm
Specular Component	SCI & SCE
Stroomvoorziening	Li-ion Battery
Colour Difference Formular	ΔE^*_{ab} , ΔE^*_{uv} , ΔE^*_{94} , ΔE^*_{cmc} (2:1), ΔE^*_{cmc} (1:1), ΔE^*_{00v} , ΔE (Hunter)
Levensduur batterij	5000 measurements with 8 hours
Other Colorimetric Index	WI (ASTM E313, CIE/ISO, AATCC, Hunter) YI (ASTM D1925, ASTM 313, TI (ASTM E313, CIE/ISO) Metamerism Index MI, Staining Fastness, Colour Fastness, Colour Strength, Opacity
Displayed Data	Spectrogram/Values, Samples Chromaticity Values, Colour Difference Values/Graph, PASS/FAIL Result, Colour Offset
Inter- Instrument-Agreement	MAV/SCI: $\Delta E^* \leq 0.15$
Spectrum	400 - 700 nm
Bandbreedte	10 nm
Vormen van verlichting	CIE Illuminant D65 CIE Illuminant A CIE Illuminant C CIE Illuminant D50 CIE Illuminant D55 CIE Illuminant D75 CIE Illuminant F1 CIE Illuminant F2 CIE Illuminant F3 CIE Illuminant F4 CIE Illuminant F5 CIE Illuminant F6 CIE Illuminant F7 CIE Illuminant F8 CIE Illuminant F9 CIE Illuminant F10

CIE Illuminant F11
CIE Illuminant F12

Draagbaarheid	Draagbaar
Illuminant Life Span	5 years, more than 3 million measurements
Normale valentie	2° / 10°
Talen gebruikersmenu	Engels, Duits, Frans, Spaans, Portugees, Chinees
Afmetingen	184 x 105 x 77 mm

Leveromvang

- TR 500 Sphere Spectrophotometer
- OnShade PC Software
- White and Black Calibration Board
- Dust Cover
- USB Cable
- External DC Power Supply
- USB Stick with User Manuals in English, French, German, Spanish, Portuguese and Chinese
- Sturdy Carrying Case

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