

Lovibond® Colour Measurement Tintometer® Group



TRA 520 Handheld & Benchtop Sphere Spectrophotometer



- Compact, Lightweight and Easy to use Sphere Spectrophotometer
- Designed for Fast, Accurate and Precise Colour Measurement
- On Screen Target Display Allows Positioning to be Perfect Every Time
- OnShade Software Included for FREE – Perfect for Detailed Data Analysis

Code: 403225

Handheld and Benchtop

With the ability of being both a handheld and a benchtop unit, the TRA 520 offers the best of both worlds. The compact, ergonomic and lightweight design of the handheld unit along with the precision-engineered benchtop stand makes the TRA 520 ideal for users on the go or in the laboratory.

Applications

The TRA 520 allows the user to measure most applications including powders, liquids, gels, pastes, granules and solid materials. Users can also measure fluorescent materials with UV In and UV Out.

Accuracy

Giving accurate and repeatable results is what the TRA 520 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 metamorphism.

Aperture Options

Choosing the correct aperture size for your surface is extremely important for accurate measurement. The TRA 520 gives you the flexibility to adjust aperture size from 10mm/8mm to 5mm/4mm with the switch of a button. This adjustability of aperture helps to ensure the instrument is perfect for your measurement needs.

Calibration

The calibration board supplied with every TRA 520 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 TRA 520 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 TRA 520 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, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12 illuminants. In addition, the TRA 520 can report a wide selection of other Colorimetric Index's: 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 valuesN6

Industrie

Autres industries | Industrie agroalimentaire et boissons | Industrie chimique | Industrie pharmaceutique | Pétrole et gaz

Applications

Matières plastiques | Produits ménagers | Revêtements | Textiles

TRA 520 Handheld & Benchtop Sphere Spectrophotometer

The TRA 520 is a cost effective quality control solution, which can be used as either a handheld or a benchtop spectrophotometer. The lightweight and ergonomic design along with the portable benchtop stand makes it ideal for quality control in the lab, field or in the manufacturing plant. Available with switchable apertures of 10mm/8mm & 5mm/4mm and the ability to measure fluorescent materials with UV In and UV Out makes the TRA 520 the perfect cost-effective handheld and benchtop spectrophotometer.N616

Fiche technique

Applicable Standard	ASTM 313 ASTM D1925 ASTM E308
Type de Couleur	Opaque
Géométrie Optique	Reflect: di: 8°, de: 8° (diffused illumination, 8 degree viewing angle)
Intégration de la taille de la sphère	48 mm
Mode Spectrophotométrique	Concave Grating
Sensor	256 image Element Double Array CMOS Image Sensor
Display	3.5 inch TFT colour LCD, Capacitive Touch Screen
Interfaces	USB
Intervalle spectral	10 nm
Mode de Mesure	Single Measurement, Average Measurement
Stockage externe	2000 Standards : 20000 Samples
Méthode de Location	Camera View Finder Locating
Plage de Réflectance Mesurée	0 - 200 %
Heure de la mesure	2.6 s
Ouverture de Mesure	Dual Aperture: 10mm/8mm & 5mm/4mm
Composant Spéculaire	SCI & SCE
Alimentation	Li-ion Battery
Formulaire de Différence de Couleur	ΔE^*_{ab} , ΔE^*_{uv} , ΔE^*_{94} , ΔE^*_{cmc} (2:1), ΔE^*_{cmc} (1:1), ΔE^*_{00v} , ΔE (Hunter)
Durée de vie batterie	5000 measurements with 8 hours
Autre Indice Colorimétrique	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
Données Affichées	Spectrogram/Values, Samples Chromaticity Values, Colour Difference Values/Graph, PASS/FAIL Result, Colour Offset
Corrélation inter-instrument	MAV/SCI: $\Delta E^* \leq 0.15$
Domaines spectraux	400 - 700 nm
Largeur de bande	10 nm
Illuminants	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

Portabilité	Portable
Durée de Vie de l'Illuminant	5 years, more than 3 million measurements
Observateur	2° / 10°
Langues interface d'utilisateur	Anglais, Allemand, Français, Espagnol, Portugais, Chinois
Dimensions	184 x 105 x 77 mm

Contenu de livraison

- TR 520 Sphere Spectrophotometer
- TRA Portable benchtop Stand
- OnShade PC Software
- White and Black Calibration Board
- White background plate
- Dust Cover
- USB Cable External DC Power Supply
- USB Stick with User Manuals in English, French, German, Spanish, Portuguese and Chinese
- Sturdy Carrying Case
- 10 mm, 20 mm and 30 mm Optical Glass cells
- Cell Cover

Accessoires

Titre	Code
W586/OG/10 verre optique	605890
W586/OG/10 verre optique, 5 pc	605895
W586/OG/20 verre optique	605900
W586/OG/20 verre optique, 5 pc	605905
W586/OG/30 verre optique	605910
W586/OG/30 verre optique, 5 pc	605915

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