



Whiteness and Chromaticity Tester TP-A10

Whiteness Meter TP-A11

Whiteness and Chromaticity Tester TP-A10

Whiteness and chromaticity tester TP-A10 measures the whiteness, yellowness, color and color difference, reflectance value, stimulus value of the sample. It measures the paper opacity, transparency, light scattering coefficient, light absorption coefficient and ink absorption value. The compact, advanced circuit design ensures the accuracy and stability of measurement data. This color tester measures the ISO brightness (blue whiteness R457) & Z whiteness (Rz) of fluorescent whitening sample due to the emission of the fluorescent material.

Features

- ▣ Stimulate D65 illuminator to illuminate
 - ▣ Measurement of the opacity, transparency
 - ▣ Determination of light scattering coefficient 'S' and optical absorption coefficient 'A'
 - ▣ Measuring ink absorption value
 - ▣ Measures WH hunter whiteness, YI Yellowness, CIE whiteness,
 - ▣ Use of large screen color touch LCD to view measurement, statistical data
 - ▣ User-friendly data operations
 - ▣ Equipped with RS232 interface, with PC connections for data communication
 - ▣ Power protection, No loss of data on power off
-

Applications

Whiteness & color tester is used to measure color values, brightness, whiteness in paper-making, printing, ceramics, chemicals, textile printing and dyeing, building materials, food, salt and other industries.

Specification

| Model no. | TP-A10 |
|----------------------|---|
| Sample (size) length | Diameter ≥ 30 mm, Thickness ≤ 40 mm |
| Measurement mode | Diffuse reflection factor R_x, R_y, R_z , stimulus value Y_{10}, X_{10}, Z_{10} , chromaticity coordinates x_{10}, y_{10}, z_{10} ; lightness L^* , chroma $a^* b^*$, chroma $C^* ab$, hue angle $h^* ab$, dominant wavelength λ_d , excitement purity P_e , color difference $\Delta E^* ab$, lightness difference ΔL^* , chroma difference $\Delta C^* ab$, hue difference $\Delta H^* ab$, Hunter system L, A, b |
| Stability | ≤ 0.1 within 30 min |
| Accuracy | Chromaticity co-ordinate 0.0001 |
| Repeatability | R_x, R_y and R_z $s \leq 0.1$ chromaticity co-ordinate $s \leq 0.0010$, R_{457} $s \leq 0.10$ |
| System | D/0 lighting geometrical viewing conditions, diffuser diameter (d) 150 mm, testing hole diameter 30 mm |
| Light measurement | CIE whiteness (Ganz whiteness W_{10} , Color cast value TW_{10}), WH hunter whiteness, YI Yellowness, ISO brightness R_{457} |
| Storage | 9 reference samples |
| Dimension (L*W*H) | 360×264×400 mm |
| Net weight | 23 kg |
| Power supply | 220 V ± 10 %, 50 Hz |

Whiteness meter TP-A11

Whiteness meter TP-A11 is used to measure the whiteness of objects. Its compact, advanced circuit design ensures the accuracy and stability of measurement data. It measures ISO (R457) whiteness and fluorescence whitening of the materials. The whiteness meter is provided with light absorber to eliminate the influence of specular reflection of the sample.

Features

- ▣ Stimulate D65 illuminator to illuminate
 - ▣ Adopted with D/O lighting geometrical viewing conditions
 - ▣ Determination of brightness stimulation value
 - ▣ Determine the opacity
 - ▣ Determination of transparency
 - ▣ Determination of light scattering coefficient S and optical absorption coefficient A
 - ▣ Measuring ink absorption value
 - ▣ Equipped with RS232 interface, with PC connections for data communication
 - ▣ Use of large screen color touch LCD to view measurement, statistical data
 - ▣ User-friendly data operations
 - ▣ Power protection, No loss of data on Power off
-

Applications

Whiteness meter is widely used to measure whiteness in paperboard, textile printing & dyeing, paint, plastic products, ceramic, enamel, detergent, cosmetics.

Specification

| Model no. | TP-A11 |
|-------------------------|--|
| Sample (size) length | Diameter ≥ 30 mm, Thickness ≤ 40 mm |
| System | D/O lighting geometrical viewing conditions, diffuser diameter (d) 150mm, testing hole diameter 30mm |
| Light source | D65 as illuminating source |
| Zero drift | $\leq 0.1\%$ |
| Indication drift | $\leq 0.1\%$ |
| Indication error | $\leq 0.5\%$ |
| Repeatability error | $\leq 0.1\%$ |
| Mirror reflection error | $\leq 0.1\%$ |
| Dimension (L*W*H) | 360×264×400 mm |
| Net weight | 20 kg |
| Power supply | 220 V $\pm 10\%$, 50 Hz |