VS450

Non-contact spectrophotometer with gloss sensor
VS450 Advantages

VS450 is a non-contact 45/0° geometry benchtop spectrophotometer designed for color and gloss measurements on many types of wet and dry samples including paints, powders and plastics. It includes an integrated gloss sensor providing 60 degree correlated gloss values, and has a versatile form factor which simplifies measurements on two and three dimensional objects.

Product Features:

• Non-contact color measurement allows sample measurements from a distance, eliminating surface distortion caused by contact based measurement methods

• Full system LED illumination provides years of reliable performance

• Line of Sight™ visibility to the sample enables technicians to quickly and easily position the sample for measurement

• Active Visual Targeting™ projects a prominent illuminated target ring onto the sample for precise and accurate measurements

• Dual measurement spot sizes, 6mm (1/4”) and 12mm (1/2”) which can quickly and easily be switched without the need to recalibrate

• Integrated gloss sensor provides 60° correlated gloss values

• Versatile design improves measurement capabilities on two and three dimensional objects

• Best in class color accuracy and repeatability

VS450 is a solution for many of the measurement problems that have remained unsolved. Products that normally require protection from physical contact such as liquids and pastes, or in which the surface appearance is changed by the presentation method, such as when the sample is pressed behind glass, can now be measured in their natural, unaltered state, as the eye sees the sample.
Paint Applications
Reduce formulation and QC time by measuring paint in the wet. When used with X-rite’s Color iMatch, the user can adjust their matching target to be lighter or darker than their standard, improving formulation time. And the ability to correlate a wet to dry sample shaves valuable QC for improved productivity and reduced downtime.

Cosmetic Applications
Cosmetic products range in material from powders to pastes, all of which are difficult to measure with traditional contact based instruments. Sample presentation methods such as glass barriers often distort the appearance of the material. VS450 eliminates this surface distortion with its unique ability to measure without contact, yielding truer results more representative of what the eye sees.

Odd Shaped Applications
The unique form of VS450 allows easy and fast measurements on odd shaped samples such as molded plastics, china, plastic ware, cans and bottles, extruded and molded plastics, furniture pulls and knobs and other difficult to measure objects.

Other Applications
- **Powders**
  Talc, plastic dispersions, pigments, detergent…
- **Processed Foods**
  Powdered cheese, cocoa, powdered milk, butter, meats, yogurt…
- **Liquids, Creams and Pastes**
  Hand lotion, suntan lotion, motor oil, latex caulk, soap, adhesives…
- **Textured Soft Goods**
  Textile, suede…
VS450

Technology That Means Business


X-Rite is a world leader in providing global color control solutions for manufacturing and quality management requirements. We lead the industry in offering service options to ensure uninterrupted performance of all X-Rite products. Training and educational resources are available globally and online for both new and experienced users to optimize their color measurement capabilities.

Visit xrite.com for more information about X-Rite products. X-Rite customers worldwide may also call the Applications Support team at CASupport@xrite.com or Customer Service at 800-248-9748.

SPECIFICATIONS:

Instrument type: Spectrophotometer with gloss sensor
Geometry: 45/0° dual illumination
Illumination: Full spectrum LED
Spectral engine: True Dual beam, 31 channel
Spectral range: 400 – 700 nm
Spectral interval: 10nm measured, 10nm output
Measurement range: 0-150% reflectance
Calibration interval: once per week or temperature shift > 14° C (25.2°F) (self detected)
Measurement spot size: 6mm (1/4") and 12mm (1/2")
Measurement distance: 38mm (1 ½") nominal lens to measurement surface
Short term Repeatability:
6mm 0.035 dEab Maximum (white ceramic tile)
12mm 0.025 dEab Maximum (white ceramic tile)
Inter-instrument agreement:
6mm 0.15 avg. dEab (12 BCRA tiles)
12mm 0.15 avg. dEab (12 BCRA tiles)
Gloss Geometry:
45/0°, 60° Correlated
Gloss Repeatability:
0-10 GU, ± 0.2 GU
10-100 GU, ± 0.6 GU
Gloss Reproducibility:
5-92 GU
3.0 GU maximum, 1.5 GU average
Operating temp: 10° - 40°C (50° - 104°F)
Humidity: 0-85% relative non-condensing
Operating voltage: 24v ± 2 VDC @ 1.2 A Max
Communication: USB 2.0
Storage: -20° – 70°C (4°F – 158°F)
Lamp life: >20 million flashes
Functional size:
L: 9.75 in. (24.80 cm), W: 6.0 in. (15.24 cm), H: 5.57 in. (14.60 cm)
Functional weight: 4.931 lbs (2.24 kg)
Safety Compliance:
UL 61010-1, CSA 22.2 No. 1010.1 and IEC (EN) 61010-1
Usage: Indoor Only
Altitude: 2000 m
Pollution Degree: 2
Overvoltage: Category II

Design and specifications subject to change without notice.