Lico 690 Professional Spectral Colorimeter

Product #: LMV187.53.40001
USD Price: Contact Hach
Ships within 2 weeks

Competence in Color


Exact color calculations which conform to several DIN-ISO-ASTM standards or AOCS Methods are done with only one measurement. Traditional visual color values like the iodine color value, Hazen or Gardner are displayed as well as modern color systems, e.g. CIE-L*a*b* or color measurements corresponding to European or US pharmacopoeia.

Also transmission, extinction measurements and wavelength scans are possible so that the instrument has a multi purpose in the laboratory or production. The intuitive operation by a high-resolution touchscreen makes measuring easy in routine analysis. The measuring results can easily be transferred to an existing laboratory network via Ethernet interface.

All important color scales included in one instrument
The Lico 620 with up to 5 color scales is designed for fast routine measurements in the laboratory and in production facilities. It is already in use in a wide variety of areas in the chemical industries for quality and production control, e.g. to assess surfactants, oils, fats, resins and synthetic resins.

The Lico 690 Spectral Colorimeter is flexible to use and works with many applications, such as chemical, pharmaceuticals, oil industries and the food and beverage industry. 26 color scales are directly integrated in the instrument: conventional scales like iodine, Hazen (Pt Co), Gardner, Pharmacopoeia as well as specific scales like Saybolt or ASTM.

Simple integration into the laboratory network through Ethernet connection
Lico instruments can be easily integrated to existing laboratory networks through an Ethernet interface.

High level of measurement reliability through a comprehensive set of test aids
Certified test filters, reproducible standard color solutions and an integrated implementation of AQA (Analytical Quality Assurance) ensure optimum measurement reliability. Measured values can be evaluated in all scales, even post-measurement with archived spectral data.

Easy handling
The measurement process starts automatically when the sample cell is inserted, and the measurement vial is identified by the instrument. The easy-to-change cell compartment facilitates cleaning and/or replacement.

The operation of the Lico colorimeters requires only minimum training effort thanks to clear instructions on the color touch-screen.

Specifications

Color Scales: European, US and Chinese Pharmacopoeia (EP, USP, CP); DIN 6162 Iodine; ISO 6271 Hazen (Pt/Co, APHA, ASTM D1209, D5386); ISO 4630 Gardner (ASTM D1544, D6045, D6166); ISO 27608 Animal and Vegetable Fats and Oils; ISO 11664 Colorimetry; ASTM E308 CIE Color; ASTM D156 Saybolt; ASTM D1500 Mineral Oil (ISO 2049); ASTM D848 Acid Wash Test; ASTM D1925 Yellowness Index (ASTM D5386); AOCS Cc13e, BS 684 Ly/Lr; ADMI, ICUMSA, EBC, ASBC, Hess-Ives
Cuvette Compatibility 2: 10 mm rectangular sample cell
Cuvette Compatibility 3: 50 mm rectangular sample cell
Display: TFT WVGA color graphic touch-screen
Display Resolution: 480 - 800 pixel
Display Size: 17.8 cm (7 in.)
Display Type: Color graphic
Includes: Cell adapter, dust cover, power supply, user manual
Interface: 2x USB Typ A, 1x USB Typ B, 1x Ethernet
Memory: 100 color references; 1000 photometric values; 20 wavelength scans; 20 time scans; 3000 color readings
Model: Lico 690
Operating Temperature Range: 10 - 40 °C
Optical System: 0° / 180° rectilinear
Photometric Accuracy: 0.005 Abs at 0 - 0.5 Abs
Photometric Accuracy 2: 1 % at 0.5 - 2.0 Abs
Photometric Linearity: < 0.5 % to 2 Abs with neutral glass at 546 nm
Photometric Linearity 2: ≤ 1 % with neutral glass at 546 nm
Photometric Measuring Range: ±3.0 Abs (wavelength range 340 - 900 nm)
Power Requirements: 110 V - 240 V
Reproducibility: ±0.2 % transmission
Sample Cell Compatibility: 11 mm round sample cell
Standard Illuminant: A/C/D65
Standard Observer: 10°
Storage Conditions: -40 °C - 60 °C
User Interface: Touch-screen, ext. USB keyboard
Wavelength Accuracy: ±1.5 nm (wavelength range 340 - 900 nm)
Wavelength Calibration: Automatic
Wavelength Range: 380 nm - 720 nm used for colorimetric calculations
Weight: 4.2 kg
What's included?: Instrument, power supply, printed basic user manual, CD with full user manual, 10 mm cell adapter, dust cover

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