

# Lico Spectral Colorimeters

## Competence in Color

The spectral color measurement of clear liquids is indispensable in many fields and serves as a quality assurance method for solvents, paints and pharmaceuticals. The highest measuring reliability is essential. Hach® ensures simple, fast measurements for the user. More than 25 years of expertise in the development of colorimeters have gone into the Lico line of instruments.

### 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, EP, USP and ChP Pharmacopoeias 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.



### Technical Data\*

Model	Lico 620	Lico 690
Color Scales	DIN 6162 iodine; ISO 6271 Hazen (Pt/Co, APHA, ASTM D1209, D5386); ISO 4630 Gardner (ASTM D1544, D6045); ASTM D 156 Saybolt; ASTM D 1500 mineral oil	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
Memory	400 color readings	100 color references; 1000 photometric values; 20 wavelength scans; 20 time scans; 3000 color readings
Spectral scan	No	Yes (320 nm - 1100 nm)
Sipper (optional)	No	Yes
Display	TFT WGA color graphic touch-screen	
Display Size	17.8 cm (7 in.)	
Optical System	0° / 180° rectilinear	
Source Lamp	Tungsten halogen lamp	
Wavelength Range	380 nm - 720 nm used for colorimetric calculations	
Dimensions (H x W x D)	151 x 350 x 255 mm (5.9 x 13.8 x 10.0 in.)	
Power Requirements (Voltage)	100 - 240 VAC	

*\*Subject to change without notice.*

### Order Information

**LMV187.53.20001** Lico 620 Colorimeter for up to five color scales

**LMV187.53.40001** Lico 690 Professional Spectral Colorimeter with more than 25 color scales included

*Each Lico instrument comes with a power supply, a printed basic user manual, a 10 mm cell adapter, and a dust cover.*

### Accessories & Replacement Parts

**LZM282-US** Set of 6 certified standard color solutions

**LZM339** Lico test filter set

**LZM369** Adapter for cuvettes Z (Lico 6xx)

**LYY214** Disposable sample cells, 10 x 10 mm, plastic, pk/1000

**LYY621** Disposable sample cells, round, 11 mm, pk/560

**LZM130** Sample cells, rectangular, 50 x 10 mm, plastic, pk/50

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