

Petroleum Colorimeter

AC 100 – petroleum colorimeter

The K13270 utilizes reference beam technology to measure the four most important color scales used for liquid chemicals, resins, oils, fuels, and fats for liquid color measurement. The unit provides high precision photometric color measurements that are objective, accurate and consistent over a wide variety of samples required for quality control programs. The 7 inch TFT WVGA Color Graphic Touch Screen measures wavelengths from 380nm to 720nm and has the ability to store up to 400 color readings.

specifications – AC 100

Conforms to the specifications of: ASTM D156, D1544, D1209, DIN 6162

Data log for 400 color measurements

USB Ports: 2 x Type A, 1 x Type B and 1 EtherNet

Automatic Cell Recognition

Automatic Wavelength Calibration

16 Language Options

Beam Height: 10 mm

Data Storage: 400 color readings

Interface: 2 x USB Type A, 1 x USB Type B, 1 x EtherNet

Max. Storage Humidity: 80%

Max. Operating Humidity: 80%

Operating Temperature Range: 10 to 40°C

Optical Path Length: 10 mm - 50 mm

Optical System: 0° / 180° rectilinear

Photometric Accuracy: 1% at 0.5 to 2.0 Abs, 0.005 Abs at 0 to 0.5 Abs

Photometric Linearity: < 0.5 % to 2 Abs, 1% with neutral glass at 546 nm

Photometric Measuring Range: ± 3.0 Abs (wavelength range 340-900 nm)

Reproducibility: ± 0.2 % transmission

Spectral Bandwidth: 5 nm

Standard Illuminant: C

Standard Observer: 2°

Wavelength Accuracy: ± 1.5 nm

Wavelength Calibration: automatic

Wavelength Range: 380 nm to 720 nm

Wavelength Reproducibility: 0.1 nm

Color Ranges – AC 100

Iodine Color (DIN 6162)

Hazen Color, APHA Pt/ Co Color (ASTM D1209, D5386, ISO 6271)

Gardner Color (ASTM D1544, ISO 4630)

Saybolt Color (ASTM D156)

Dimensions (H x W x D)

15.1x35.0x25.5cm (5.94x13.87x10.04in) Net Weight: 4.20 kg (9.26lbs)

Electrical Requirements

100-240V / 50-60Hz Output: 15V/40 VA

ordering information

catalog no. description

K13270 AC 100 Petroleum Colorimeter

K13560 AC 500 Automatic Petroleum Colorimeter

accessories

K13356 Rack for (7) 50 x 10 Cuvettes

K13253 Color Calibration Standards

K13353 Disposable Plastic Cuvettes 50x10, 50 pcs (for lighter samples)

K13351 Disposable Optically Clear Cuvettes, 11mm, 490 pcs, Cylindrical (for darker colored samples)

K13250-1 Cuvette - Glass 50x10mm (Recommended for gasoline samples)

K13270-1 USB Memory Stick (Note: other sticks not recommended due to possible incompatibility)

K13270-2 Protective Film for Touch Screen Display

K13270-6 Dust Cover

K13270-16 Online Data, Including USB PC Interface Cable 1.8m

K13270-17 USB-Interface Cable (1m) (Replacement)



K13260 Petroleum Colorimeter

AC 500 – automatic colorimeter

High performance Spectral Colorimeter measures the color of clear and transparent liquids of over 25 different color scales. Additional capabilities include transmission, extinction measurements and wavelength scans, making the K13560 a versatile instrument for every lab. An Ethernet connection allows users to easily integrate the unit into their laboratory network and transfer results directly to the network. Extremely user friendly; providing clear operating instructions on the 7", high resolution touch screen.

- Covers over 25 color scales
- Automatic Wavelength Calibration
- USB - Ports: 2xType A, 1xType B and 1 EtherNet
- Automatic Cell Recognition
- 16 Language Options
- Data storage for 100 color references, 1000 photometric values, 20 time scans, 20 wavelength scans and 3000 color readings

specifications – AC 500

Beam Height: 10 mm

Data Storage: 100 color references, 1000 photometric values,

3000 color readings, 20 time scans, 20 wavelength scans

Display: TFT WVGA Color Graphic Touch Screen

Display Size: 7 inch

Interface: 2 x USB Type A, 1 x USB Type B, 1 x Ethernet

Operating Temperature Range: 10 to 40°C

Optical Path Length: 10 - 50 mm

Optical System: 0° / 180° rectilinear

Photometric Accuracy: 0.005 Abs at 0 to 0.5 Abs, 1% at 0.5 to 2.0 Abs

Photometric Linearity: 1% with neutral glass at 546 nm,

< 0.5 % to 2 Abs with neutral glass at 546 nm

Photometric Measuring Range: ± 3.0 Abs (wavelength range 340-900 nm)

Reproducibility: ± 0.2 % transmission

Scanning Speed: 8 nm/s (in steps of 1 nm)

Source Lamp: Tungsten Halogen Lamp

Spectral Bandwidth: 5 nm

Standard Illuminant: AC;D65

Standard Observer: 2°;10°

Storage Conditions: -40°C to 60°C

User Interface: English, French, German, Italian, Spanish, Czech,

Dutch, Greek, Polish, Slovene, Slovake, Russian, Turkish,

Chinese, Japanese, Korean

Wavelength Accuracy: ± 1.5 nm (wavelength range 340-900 nm)

Wavelength Calibration: automatic

Wavelength Range: 320 nm to 1100 nm

Wavelength Reproducibility: 0.1 nm

Wavelength Resolution: 1 nm

Color Ranges – AC 500

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; ASTM D156 Saybolt; ASTM D848 Acid Wash Test; ASTM

D1925 Yellowness Index (ASTM D5386); AOCs Cc13e, BS 684 Ly/Lr;

ADMI, ICUMSA, EBC, ASBC, Hess-Ives, Klett