## LCS IV

The LCS IV is a highly precise color instrument which spectrally measures all color shades of optically clear, transparent liquids using the dual beam principle. Besides the conventional visual color numbers (Gardner, Iodine, Hazen (APHA) etc.) the LCS IV can also measure opponent color systems such as CIELab, CIELCh and Hunter Lab under the conditions of illuminant A, C, D65 and 2°/10° Standard Observer.

- Stand alone unit with built-in 7" touch-screen display allows use without the need of a PC
- All important color scales and indices included
- Automatic cuvette detection avoids faulty data measurement
- Automatic zero and calibration memory for all type of cuvettes – ensures use of correct calibration data
- Designed for the use of disposable plastic cuvettes, high precision glass cuvettes or 11 mm test tubes
- Easy to exchange rectangular cell compartment
- High measurement reliability is guaranteed by comprehensive verification kits
- User profile memory with password protection for individual configurations including GLP documentation
- Open sample compartment for ease of operation
- Front USB interface for PC or printer connection
- Easy data transfer into existing networks through integrated Ethernet (LAN) interface



Standards		
AOCS	Method Cc 13e;	
	Method BS 684 ly/Lr	
ASTM	D 156, D 848, D 1045, D	
	1209, D 1544, D 1925, D	
	1500, D 5368, E 308	
DIN	5033, 6162, 6174	
ISO	4630, 6271, 2049, 27608	

## **Ordering Information**

Cat. No.	Description	
9562	LCS IV	

## Comes complete with:

Instrument with dust cover External power supply Adapter for 10 mm rectangle cuvettes addista® – color standards Disposable plastic cuvettes (10x50 mm) – pack of 10 Disposable glass cuvettes (11mm) – pack of 10 Operating manual

## **Technical Specifications**

Voltage	
100-240 V / 50 / 60 Hz	
Geometry	0° / 180° rectilinear
Spectral Range (Colorimetric)	380 to 720 nm, 10 nm resolution
Spectral Range (Photometric)	320 to 1,100 nm, 1 nm resolution
Repeatability	0.1 ΔΕ*, 1 σ
Reproducibility <sup>1</sup>	± 0.2% transmission
Light Source	Tungsten Halogen Lamp
Illuminant/Observer	A, C, D65 / 2°, 10°
Color Scale	CIELab; CIELCh; Hunter Lab
Color Difference	$\Delta E^{\star}$ and component differences, text descriptor,
	tolerances
Indices	Gardner; Hazen/APHA; Iodine; Saybolt;
	Lovibond; Hess-Ives; European, US and Chinese
	Pharmacopoeia; Mineral oil; Yellowness;
	Acid Wash Test; Chlorophyll A; ADMI
Spectral	% transmission; % absorbance, concentration
Memory	3000 color measurements, 100 color references
	1000 photometric readings
Data Export	*.csv file to USB memory stick or Ethernet
Interface	2x USB-A; 2x USB-B; 1x Ethernet (LAN)
Operating Temperature	10 to 40 °C (50 to 104 °F)
Humidity	up to 80%, 35 °C (95 °F);non condensing
Dimensions	151 x 350 x 250 mm (5.9 x 13.7 x 9.8 in)
Weight	4.2 kg (9.25 lbs)

<sup>&</sup>lt;sup>1</sup> Referred to distilled water