



## Datasheet

# Spectro **LFP<sub>qb</sub>**



### Spectral unit

- Measurement conditions: According to ISO 13655-2017 Reflection and transmission: M1 (method a), M0, M2 (UVcut), M3 (reflection only, with optional polarization filter)
- Measuring apertures: Switchable between 2, 6 and 8 mm diameter (reflection and transmission)
- Geometry:
  - reflection 45°:0° circumferential (ISO 5-4:2009)
  - transmission d:0 (ISO 5-2)
- Calibration: automatic with internal white reference
- Physical illumination: programmable color temperature
  - Reflection: 3 point circumferential, 7 LED-chip
  - Transmission: diffuse, 6 LED module
- Measuring sensor: diffraction grating with diode array
  - Spectral range: 380 ... 750 nm
  - Spectral resolution: 2 nm
  - Optical resolution: 10 nm
- Spectral reflectance range: dynamic (> 200%) for measurement of fluorescent specimens
- Short term repeatability: 0.05  $\Delta E_{00}$  on white ceramic tile (standard deviation, 10 measurements made in spot mode) < 0,2  $\Delta E_{00}$  in scanning mode
- Inter-instrument agreement on 12 BCRA color tiles:
  - Average: 0.5  $\Delta E_{00}$
  - Max: 1.0  $\Delta E_{00}$
- Display: 320x240 pixel, touch screen
- Battery: Li-Ion accumulator 3,7VDC, 5200mAh  
Charging time:
  - 2,5 hours when connected to platform,
  - 10 hours through USB port

- Temperature sensor:
  - range -20 ... +50 °C (-4 ... +122 °F)
  - resolution 0,1 accuracy: +/- 1,0
- Humidity sensor:
  - range 0 ... 100 %
  - resolution 1 accuracy: +/- 5%
- Interface:
  - USB 2.0 type C,
  - WiFi 2,4 GHz IEEE 802.11b/g/n (2,4 GHz only)
  - Open, WEP, WPA, WPA2 Security
  - FCC (USA), IC (Canada), CE (Europe), MIC (Japan), KCC (South Korea) Certified
- Dimensions: 237 x 82 x 65 mm
  - Weight: 1000 g

### Platform

- Maximum measuring area: 305 x 230 mm (LxH)
- Measuring speed: typical LFP chart with approx. 600 patches: 2 min.
- Target thickness: Max. 20 mm
- Processing unit: 1 GHz Linux board
- Interface:
  - USB 2.0 type B,
  - Ethernet RJ45
- Power adapter: 110...240 Volt
- Dimensions: 775 x 550 x 175 (table extension included)
- Weight: 12,2 kg (table extension included)

### Sensing unit

- Camera: 8 MPixel
- Processing unit: 1 GHz Linux board
- Dimensions: 260 x 83 x 53 mm
- Weight: 240 g

### **Spectro LFP qb**

- Standard equipment:
  - C5A10 Spectro LFP qb Spectral Unit
  - C5A20 Spectro LFP qb Platform (with table extension)
  - C5A30 Spectro LFP qb Sensing Unit
  - C5H40 Standard reflection sample holder
  - C5H50 Standard transmission sample holder
  - C5H70 Spot Measurement Guide
  - Power adapter
  - USB cable Type B (Platform to Computer)
  - USB cable Type C (Spectral unit to Computer)
  - Dust cover
  - Operating manual
  - Measuring software: Barbieri Gateway for Microsoft Windows 7 or newer (64 Bit), Mac OSX 10.10 or newer (free download)
- Available Accessories:
  - Electrostatic sample holder Spectro LFP qb
  - White backing electrostatic sample holder Spectro LFP qb
  - Black backing electrostatic sample holder Spectro LFP qb
  - Set of 2 sample holders for heavy and thick media
  - Frame transmission sample holder for M1 measurements
  - DOC activation Spectro LFP qb (software activation)
  - Polarization filter Spectro LFP qb
  - Flight Case Spectro LFP qb
- Total weight including standard accessories: 14,5 kg
- System requirements
  - Microsoft Windows 7 or later (32 and 64 bit)
  - Mac OS X 10.10 or later