ESEQuant LR3 — Lateral Flow Reader

The ESEQuant LR3 is a highly sensitive, robust, and cost-effective optical measurement system for rapid tests at the point of need. This flexible and reliable system, based on a ready-to-use concept, enables you to easily develop fluorescence or colorimetric lateral flow tests. Starter kits are immediately available and can be rapidly adapted to various test strip or cassette formats.

Technical specifications

Instrument	
Size (L x W x H)	236 x 215 x 104 mm (9.3 x 8.5 x 4.1 in.)
Weight	Approximately 2.5 kg (5.5 lb.)
Test format dimensions	Flexible adaptation possible: Dipstick: width 4–6 mm; length <100 mm Cartridge: up to 130 x 50 x 12.5 mm (L x W x H)
User interface	Interactive 17.8 cm (7 in.) touchscreen
Power supply	100–240 VAC, 50/60 Hz, 24–12 VDC (car adapter)
Operating conditions	15–35°C (59–95°F), humidity 10–70%
Connections	4 + 1 x USB, Ethernet, plus optional WLAN and Bluetooth $^{\tiny{\circledR}}$
Memory capacity	Up to 100 test methods and up to 1000 test results
Template volume	IP20
Full standalone operation	 Data entry via touchscreen, bar code, RFID Multiple assays per run User access control Full traceability of results LIS and HIS connectivity (HL7 interface plus optional POCT-1A)



Optics	
Optical system	2-channel confocal detector with LED excitation and photodiode detection
Signal detection	Colorimetric and fluorescence
Fluorescence wavelengths excitation/emission (nm)	470/520 (e.g., fluorescein); 365/625 (e.g., europium); 625/680 (e.g., DyLight®) Other combinations available with particular wavelengths (e.g., excitation 365 to 660/ emission 460 to 720)
Colorimetric detection	Colloidal gold, colored latex beads, carbon, etc.
Measurement time	<30 seconds (for one wavelength channel)
Number of test strips	Standard: 1 test strip Optional Y-axis: up to 5 (dipstick, width 5 mm)
Number of test lines per strip	Up to 19 test/control lines per strip
Surveillance	Internal calibration with solid standards
Accessories	
Lateral Flow Studio comprehensive development software	 Method creator — freely definable test methods Data evaluation — user can select various algorithms for quantitative tests Final result evaluation — user can define the final results using combined results from individual lines
Rechargeable batteries	Up to 200 measurements without an external power supply
External printer	Standard label printer
Bar code scanner	Internal 2D or external 1D or 2D scanner

Visit www.qiagen.com/ESE and discover more!

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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