
ESEQuant LFR — Lateral Flow Reader

The ESEQuant LFR 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)	165 x 178 x 46 mm (6.5 x 7 x 1.8 in.)
Weight	700 g (1.5 lb.)
Test format dimensions	Flexible adaptation possible: <ul style="list-style-type: none">■ Dipstick: width 4–6 mm; length <60 mm■ Cartridge: up to 100 x 45 x 10 mm (L x W x H)
User interface	Monochrome graphical LCD display (128 x 64 pixels).
Power supply	100–240 VAC, 50/60 Hz, 24–12 VDC (car adapter)
Operating conditions	15–40°C (59–104°F); humidity 10–70%
Connections	1 x USB Slave, 2 x Serial, plus optional Bluetooth®
Memory capacity	Up to 10 test methods and up to 100 test results
Template volume	IP21
Operation	<ul style="list-style-type: none">■ Standalone (reader keypad)■ External 2D bar code or internal RFID for method update■ PC connected with dedicated end-user software■ Mobile device via app and Bluetooth



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	<35 seconds (for one wavelength channel, 20 mm area)
Number of test strips	1 test strip
Number of test lines per strip	Up to 10 test/control lines per strip
Surveillance	Internal calibration with solid standards
Accessories	
Lateral Flow Studio comprehensive development software	<ul style="list-style-type: none"> ■ 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 50 measurements without an external power supply
External printer	Thermal printer
Bar code scanner	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.

Trademarks: QIAGEN® (QIAGEN Group); Bluetooth® (Bluetooth SIG, Inc.); DyLight® (Pierce Biotechnology, Inc.). © 2014 QIAGEN, all rights reserved.

