

Lateral Flow Reader for colorimetric and fluorescence- labeled rapid test

Lumi Flex



The Lumi Flex Family is a versatile platform for the digital evaluation of lateral flow rapid tests. It provides reliable qualitative, semi-quantitative, and quantitative results across diagnostics, veterinary, food and feed, and life science applications.

Features at a Glance:

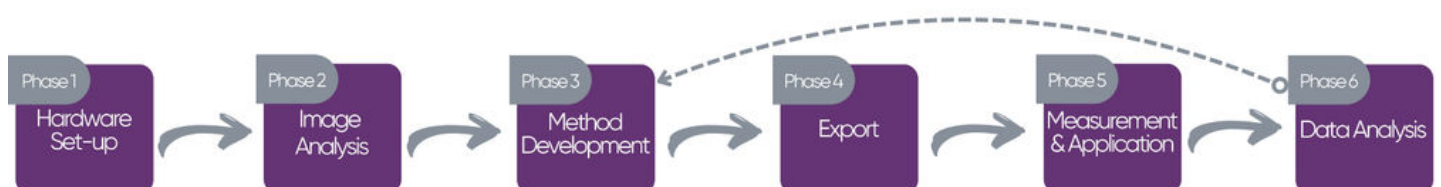
- LIS connection for seamless data integration
- User-centric workflow with intuitive interface
- Low measurement variability for reliable results
- Compatible with all cassette formats
- High sensitivity and flexibility for any dye
- Modular architecture for easy customization

Choose the Right Instrument for Your Assay

Lumi Flex is designed for colorimetric rapid tests, including lateral flow assays, dot assays, and color-change tests such as urine strips. **Lumi Flex Fluo** builds on these capabilities by adding highly sensitive detection of fluorescent labels, including europium and quantum dots. Both systems share the same flexible platform, allowing customer-specific assay adaptation and digital, paperless data management.

The Complete Workflow: From Hardware to Measurement

The Lumi Flex System supports every stage of your lateral flow assay development—from image optimization and method creation to fast, stand-alone measurements. Its integrated software tools and the Lumi Flex Reader work together in a streamlined workflow, enabling efficient assay development and reliable, reproducible results.



One Workflow. One Platform. Reliable Results.

Customize your very own reader

Flexible options to meet your needs – the Lumi Pro's modular design lets you tailor every aspect to your application.

Detection / Raw Data Evaluation

Choose from UV/VIS, NIR, SERS, UCP, fluorescence

Accessories

External printer, barcode reader

Housing

Custom color, logo, and design options

Software Customization

Custom software and fluorescence detection

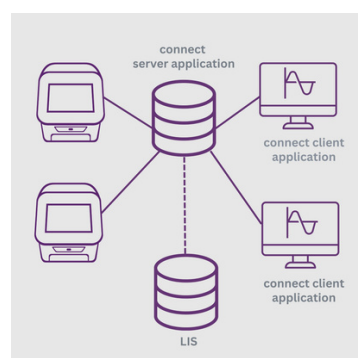
Workflow / User Interface

Tailored UI and workflow configuration

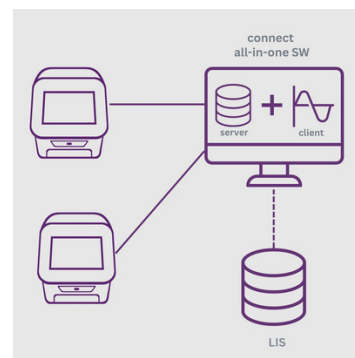
Developer Tools

User-friendly Software Suite for test development

Seamless Connectivity



Integrate the Lumi Flex System effortlessly into your existing workflow. Secure data management, automated result transfer, and flexible interfaces enable smooth communication with laboratory and healthcare information systems, from stand-alone operation to fully connected environments.



Technical Specifications

Instrument

Size: 180 x 160 x 145 mm
(7 x 6.3 x 5.7 in)
Weight: 1.2 kg (2.6 lb)

User Interface

Interactive 10.9 cm (4.3 in) touchscreen
GUI in several languages
2D barcode reading functionality

Connections

3 x USB
Ethernet
Optional Wi-Fi module

Connectivity

External barcode reader
Dymo label printer supported
Data management software

Operating Conditions

15–35°C (59–95 F)
Humidity 10–70%

Optics

Optical System

5-megapixel camera (8-bit)
Industrial standard

Signal Detection

Colorimetric and europium-labeled
test bands and dots (300µm)

Illumination

3 color RGB LED or UV LED
for fluorescence excitation
Optimized for homogeneous
illumination of wide range of
test cassettes

Surveillance

Supervision of optical system
among multiple calibration
standards (internal)

Performance

Test Strip Dimensions

Flexible adaptation possible:
Dipstick: width 4–6 mm; length 100 mm
Cartridge: up to 120 x 40 x 15 mm

No. of Test Strips: Up to 5

Test Lines/Strip: Up to 19

Memory Capacity

Up to 100 test methods
Up to 300 test results

Reliability: >99.7%

Reproducibility

Intra-device CV: <0.5%
Inter-device CV: <3%

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