

dgtechnologies



Lateral Flow Reader for a wide range
of colorimetric and fluorescence labeled rapid tests

Lumi Flex

Accurate, precise and compact

Lumi Flex – Digitalize your lateral flow test

The Lumi Flex is a rapid test reader platform available in two configurations to read out visual test lines and europium-labeled test lines. The camera-based system is suitable for different test applications in the field of human diagnostics, veterinary testing or food and feed analysis. It allows the user to interpret assays using test-specific bands qualitatively, semi-qualitatively or quantitatively. The Lumi Flex even makes the interpretation of dots, color change pads, like urine test strips possible without a hardware change.

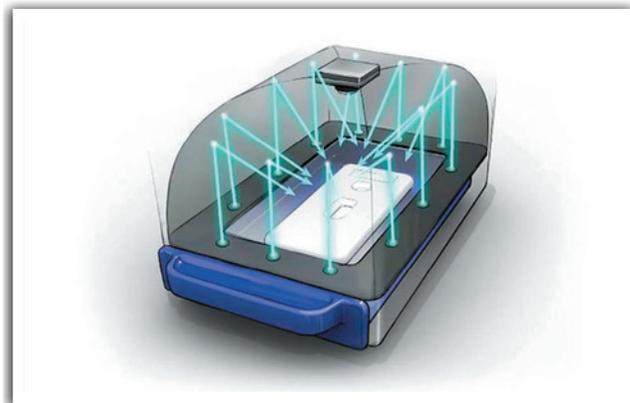
Fluorescence for europium or similar dyes like quantum dots can be read out using the Lumi Flex Fluo. The sensitivity can be tuned to fit the assay needs, and internal reference material guarantees the highest stability and low drift of the optical system.

Our top-of-the-line lateral flow reader is characterized by a high degree of flexibility for customer-specific applications, as well as the advantage that it can be integrated into a wide variety of networks for paperless bi-directional data transport.

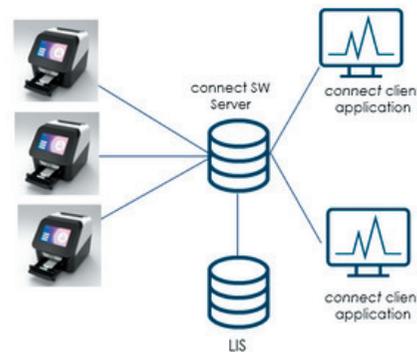
The Lumi Flex family of readers, comprising the Lumi Flex and the Lumi Flex Fluo, allows users to digitally interpret and evaluate tests with never-before-seen sensitivity, thus increasing patient safety.

Features at a glance:

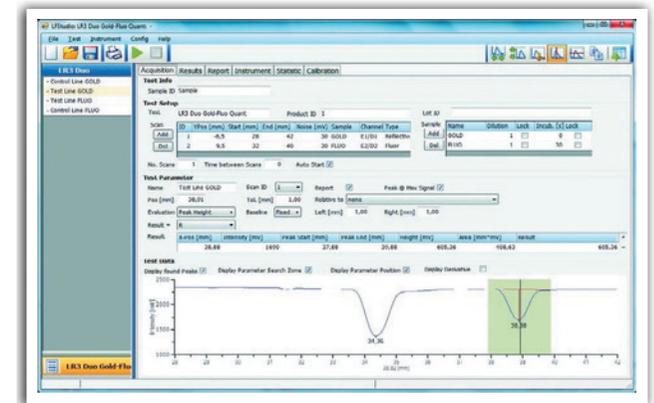
- LIS connection
- User-centric workflow
- Low measurement variability
- Compatible with all cassette and strip formats
- Robust
- Fluorescence and colorimetric readout



Illumination concept



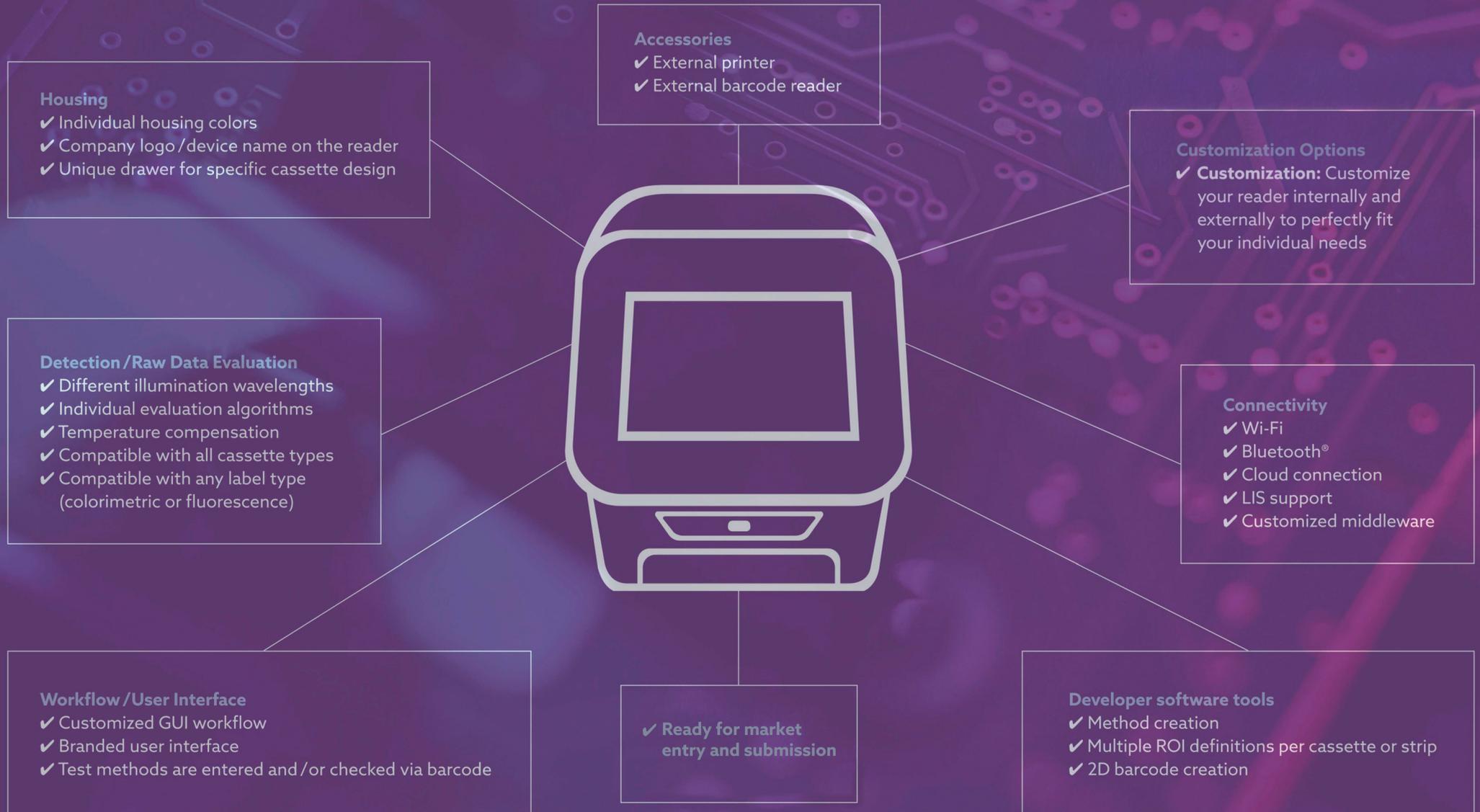
Connect Software



Test developer tools

Flexible options to meet your needs

Customize your very own reader



Technical Specifications

Instrument

Size (L x W x H)

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 and UV LED for fluorescence excitation
- Optimized for homogeneous illumination of a 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 (L x W x H)

Number of Test Strips

Up to 5 (dipstick with 5 mm width)

Number of Test Lines per Strip

Up to 19 test/control lines per strip

Memory Capacity

Up to 100 test methods and up to 300 test results

Reliability

>99.7%

Reproducibility

Intra-device CV: <0.5%

Inter-device CV: <3%

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