dgtechnologies

Lateral Flow Reader for
a wide range of rapid tests

ESEQuant® Flex *The Generalist*

Accurate, precise and compact

# ESEQuant Flex – Digitalize your lateral flow test

The ESEQuant Flex is a rapid test reader platform that can read colorimetric lateral flow tests across different applications. It allows the user to interpret assays using test-specific bands qualitatively, semi qualitatively or quantitatively. The ESEQuant Flex even makes the interpretation of dots or color change pads, like urine test strips, possible. And they can be implemented on demand. The built-in industrial grade camera combined with multi-colored illumination offers a wide range of flexibility for many test formats.

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.
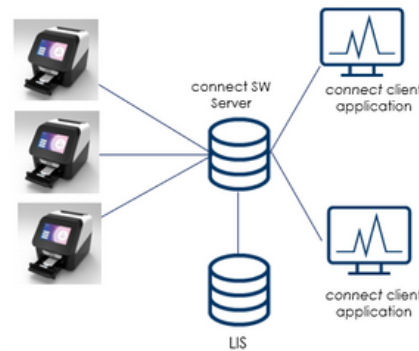The ESEQuant Flex allows users to digitally interpret and evaluate tests, thus increasing patient safety. Digital data transfer also helps hospitals increase efficiency.
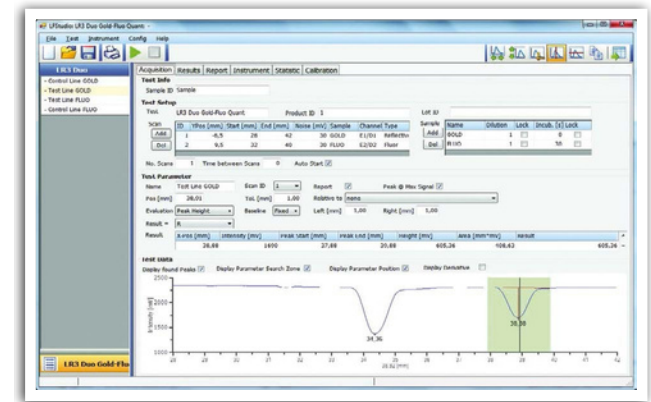
Features at a glance:
- LIS connection
- User-centric workflow
- Low measurement variability
- Compatible with all cassette and strip formats
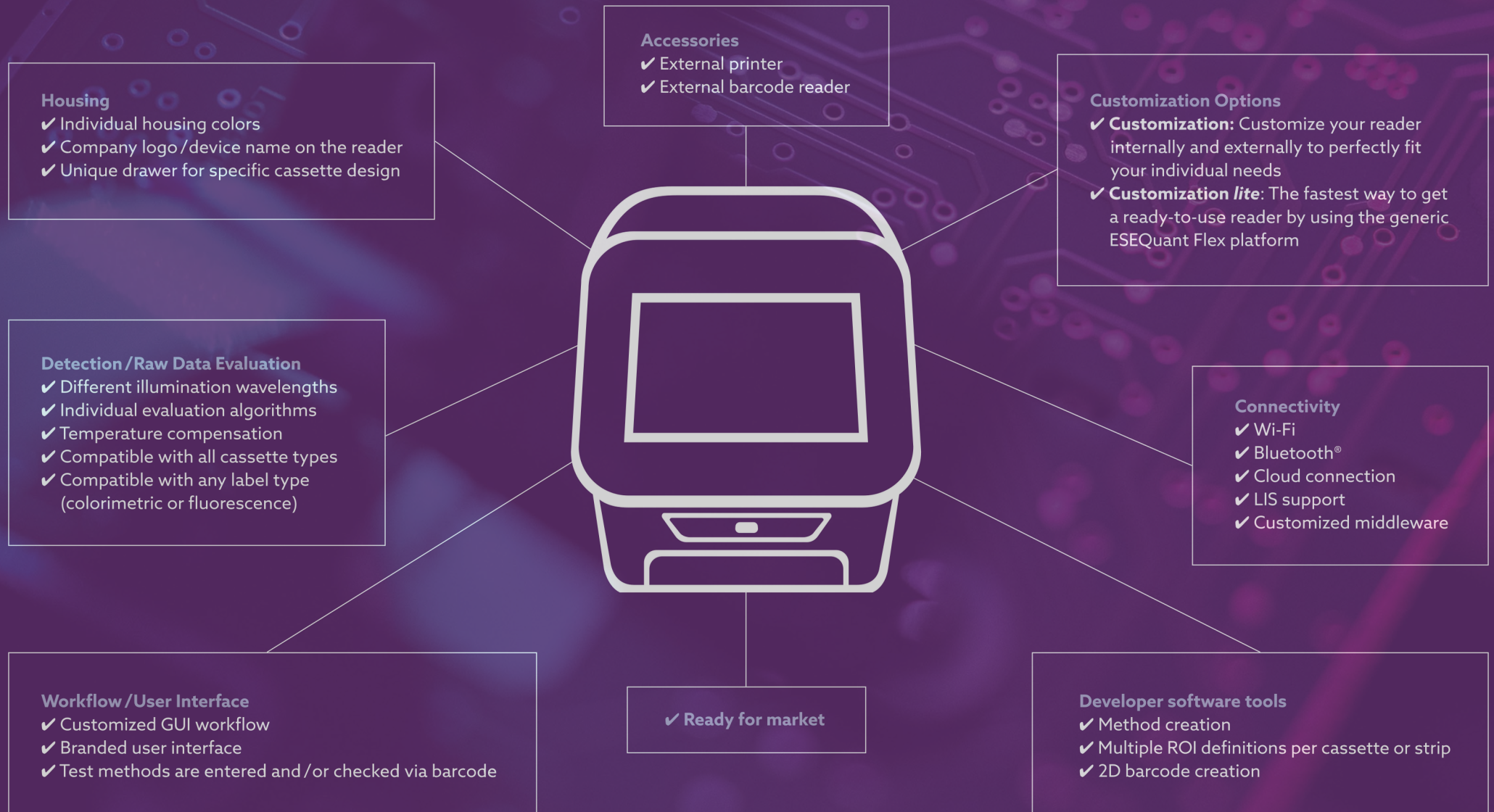- Robust
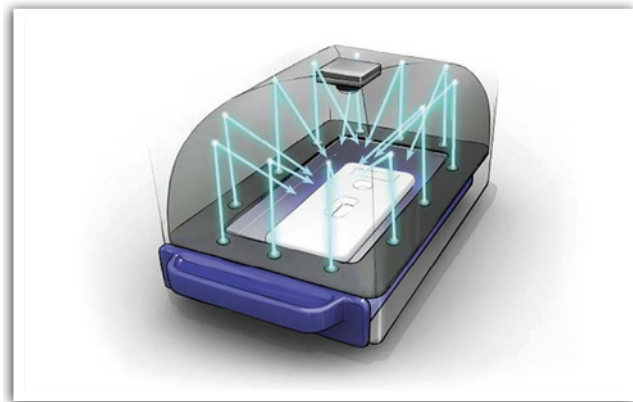
Illumination concept

Connect Software

Test developer tools

Flexible options to meet your needs

Customize your very own reader

Accessories
✔ External printer
✔ External barcode reader

Housing
✔ Individual housing colors
✔ Company logo / device name on the reader
✔ Unique drawer for specific cassette design

Customization Options
✔ **Customization:** Customize your reader internally and externally to perfectly fit your individual needs
✔ **Customization *lite*:** The fastest way to get a ready-to-use reader by using the generic ESEQuant Flex platform

Detection / Raw Data Evaluation
✔ Different illumination wavelengths
✔ Individual evaluation algorithms
✔ Temperature compensation
✔ Compatible with all cassette types
✔ Compatible with any label type (colorimetric or fluorescence)

Connectivity
✔ Wi-Fi
✔ Bluetooth®
✔ Cloud connection
✔ LIS support
✔ Customized middleware

Workflow / User Interface
✔ Customized GUI workflow
✔ Branded user interface
✔ Test methods are entered and / or checked via barcode

✔ **Ready for market**

Developer software tools
✔ Method creation
✔ Multiple ROI definitions per cassette or strip
✔ 2D barcode creation

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
• Wi-Fi module optional

Connectivity
• External bar code 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 test bands and dots (300 µm)

Illumination
• 3 color LEDs
• Optimized for homogeneous illumination
  of a wide range of test cassettes

Surveillance
Supervision of optical system among multiple
calibration standards (inside)

Performance

Test Strip Dimensions
Flexible adaption possible:
Dipstick: with 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 tests / 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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