



„How does an LFA test work?“

A lateral flow assay test (LFA) is a rapid diagnostic test designed to evaluate the presence of disease specific substances in bodily fluids such as blood. A reaction occurs inside the test strip in order to visualize these particular substances. A measuring device such as the opTrilyzer® is able to quantitatively evaluate such tests, the result can provide important information concerning the therapy of the ailment.

„With a mobile device my test would have even more potential applications.“

The opTrilyzer® device is suitable for both stationary and mobile application in enclosed spaces. Its compact design was conceived especially for rapid on-the-spot tests, for instance in an ambulance, and for usage without the need of an additional computer. Therefore all the important device functions are integrated in the handset (embedded system).

„I need a reader with especially high measurement resolution.“

The device includes an image sensor optimized for the optical analysis of the test strip. The image is read directly by an internal microprocessor and processed by a patented evaluation algorithm. The result is shown on a graphic display.

„The measurement results need to be reliable and documented.“

A multilingually available operating menu guides intuitively through the measuring process. Data storage takes place within the device and data can be printed by using an on-site printer. Furthermore data transfer to a computer is possible via USB. To ensure reliability test specific parameters are verified by barcode scanner before starting the test.

„Is the device suitable for my test?“

The opTrilyzer® is a universal device platform for the quantitative evaluation of lateral flow assays. Meanwhile it is possible to analyze test strips based on several different technologies. Close cooperation with the test manufacturer is therefore always our first priority in order to achieve an individual configuration of the device for the according test.

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LATERAL FLOW READER

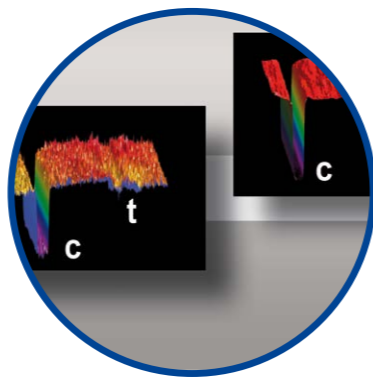
Quantitative Analysis
 Mobile and On-Site



Made in Germany



1 Reader for All Rapid Tests
 we conduct immunological in-vitro diagnostics
SIMPLE, EXACT AND FAST



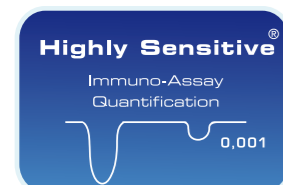
LATERAL FLOW READER

Technological Variety

Your test is based on a special technology and can only be evaluated under certain optical circumstances? Whether common LFA tests based on color change or on luminescence – the opTrilyzer® is able to analyze and quantitatively evaluate even such special test strips. Again the close cooperation with the test producer is of the highest relevance in order to guarantee an optimal adaption of the device for the test in question.

You have a test containing more than one test strip? The opTrilyzer® is also available for multiple test cartridges. Using a specially designed adapter the multiple test cartridge is optically sampled inside the device so the single test strips can be analyzed and evaluated one by one.

Freely configurable!



Reliability during Measurement

A sensor inside the device monitors the correct insertion of the test cartridge. Automatic selfdiagnostic and adjustment functions ensure homogenous conditions for the test performance. Identification of the inserted test as well as plausibility check to verify batch-specific test data occurs by using an integrated barcode reader function.

Made in Germany



Precise Evaluation Algorithm

A two-dimensional CCD sensor inside the device depicts the entire field of interest of the test strip. A unique algorithm generates a 3-dimensional volume model of the test field which is processed directly by a microprocessor. After that the data is digitally filtered. During this process inhomogeneities and errors in the geometry of the test line are detected and compensated. Using the volume integral of the entire test line for the evaluation ensures reliable measurement reproducibility and an exact quantification of the test line intensity.

Patient Data Viewer

Patient data and measurement results internally saved in the device during measurement can be transferred to a computer-based user software via USB. The software enables the administration and further processing of the data.

Quantitative Analysis

Mobile and On-Site



Unlimited Mobility

The opTrilyzer® combines all components for test line recognition, metrological evaluation and display of the results. The comprehensive calculation and storage capacity enables on-site evaluation without an additional computer. The automatic self-diagnostic and adjustment functions ensure the stability of a measurement even under changing ambient conditions. The internal power supply by rechargeable battery provides for up to 8 hours of mobile operation before recharging is necessary.



Freely Configurable

The device is configured for your test and test cartridge type upon delivery. If additional tests should supervene later the configuration can be adjusted accordingly. This occurs by loading all test specific data for the new test from an SD card into the device. To achieve an optimal image of the test strip an individual well adapter ensures the correct positioning of the test cartridge within the optical focus. For different cartridge types according well adapters are provided. Furthermore opTricon provides the test developer and producer with the evaluation software opTrilyzer@Cal.



Intuitive User Guidance

While working with the device the user is intuitively guided through the workflow of the menu. The 4.3inch color graphic display ensures good visibility of the images displayed, even in the presence of intense ambient light.

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