

# Infinite<sup>®</sup> F50

family.

INNOVATIVE EIGHT CHANNEL ABSORBANCE READERS  
WITH ADVANCED LED TECHNOLOGY



21 CFR Part 11\*



98/79/EC IVD-D\*



# Innovative. Sustainable.

## Smart.

**The Infinite F50 is Tecan's next generation, state-of-the-art eight channel absorbance microplate reader. It provides not only accurate, reproducible and fast measurements, it also sets a new standard in compact, innovative design. With its easy-to-use reader control and data analysis software, the Infinite F50 is ideal for a variety of ELISA applications.**

### Features and benefits

Eight channel ELISA reader for fast measurements

Additional reference channel for optimized light intensity

Two year warranty and tested reliability of > 100,000 plates

Endpoint, kinetic and multi-label measurements for a variety of applications

Shaking with variable time and speed

Magellan software for powerful and validated data analysis

Supports data export to LIS

Learning tutorials, example files and a choice of nine languages for getting started easily

IQ/OQ procedure available

Designed to meet IVDD 98/79/EC\* and 2011/65/EU RoHS

Supports FDA 21 CFR part 11\* functionality



21 CFR Part 11\*

98/79/EC IVD-D\*



**GreenInnovation**  
by Tecan

### Comprehensive and powerful data analysis

The Infinite F50 comes complete with Tecan's established Magellan™ reader control and data analysis software, allowing quick and easy measurements, comprehensive data reduction and excellent data presentation on laptops, as well as tablets and desktop PCs.

#### POWERFUL

- Full qualitative and quantitative EIA analysis
- Supports all major curve fittings, including point-to-point, linear and non-linear regression, polynomial, logit-log, four- and five parameter fits
- Comprehensive QC functions – such as plate-to-plate QC for trending of standards and controls – displayed in a Levy-Jennings graph
- A choice of data import and export options (Excel®, ASCII, ASTM)
- A range of kinetic data reduction features, such as mean and max slope, enzyme kinetics, etc.

#### EASY ACCESS

- Wizard-based user interface guides you through the software step-by-step
- Available in nine languages (Chinese, English, French, German, Italian, Japanese, Portuguese, Russian and Spanish)
- Example files for qualitative and quantitative ELISA assays and learning tutorials

#### COMPLIANT

Magellan Tracker software provides electronic signatures, records and multi-level user management offering full functionality to meet FDA 21 CFR part 11 and IVDD 98/79/EC requirements, allowing diagnostic applications in clinical laboratories and other regulated environments. The Infinite F50 is also compliant with the Restriction of Hazardous Substances (RoHS) and the Waste Electrical and Electronic Equipment (WEEE) directives.

# Reliable. Validated.

# Compact.

Innovative long-life LED technology helps you to save money by cutting maintenance costs

Discover how the Infinite F50 plate reader combines smart design using eight-channel optics and long-life LED technology to offer excellent reliability and a top price-performance ratio

#### FAST RESULTS

- Advanced optics with eight measurement channels for fast reading
- Optimized light intensity via reference channel for enhanced performance

#### MAINTENANCE-FREE

The Infinite F50 uses the latest LED technology instead of a traditional halogen lamp light source, providing a longer maintenance-free lifetime, lower energy consumption and compact dimensions. LEDs typically last 10 times longer than conventional halogen lamps, making inconvenient lamp changes and waiting for the lamp to warm up a thing of the past.

#### PROVEN RELIABILITY

The reliability of the Infinite F50 is proven by Tecan's unique quality tests resulting in a Mean Time to First Failure (MTTF) value of > 100,000 plates, typically corresponding to several years of successful operation.

#### WARRANTY

The 24-month warranty period for the Infinite F50 underlines the quality of Tecan's detection instruments, demonstrated by an installed base of more than 20,000 Tecan microplate readers worldwide.

#### VALIDATED

Together with Magellan Tracker software, the Infinite F50 reader meets the IVD directive 98/79/EC for in vitro diagnostic products and provides the functionality to support the FDA regulation 21 CFR part 11, ensuring technical compliance and integrity of the generated data.

#### COMPACT

The reader's innovative, state-of-the-art engineering enables unprecedented compactness, with a footprint of about four microplates. It can easily fit into any laboratory, saving valuable bench space.



Computer not included

**m** magellan  
data analysis software

**✓** qc tools  
ensure your results

# Ready for automation.

## Infinite F50 Robotic

Discover how smoothly the Infinite F50 Robotic ELISA plate reader can integrate into automated platforms, such as Tecan's Freedom EVO® and Fluent® systems

### COMPACT

- The ultra-compact design of the Infinite F50 Robotic saves valuable deck space
- Plate loading position in portrait mode helps streamline the workflow
- Allows smooth plate transfer between the reader and modules such as incubators, etc.
- Eliminates the need for a re-gripping station to change plate orientation

### EASY

- Removable section of the instrument housing allows easy teaching of the positions for plate loading and unloading with a robotic arm
- An innovative teaching tool is ideal for situations where there is insufficient space to remove the housing, for example when instruments are stacked on a shelf

### FAST

- Advanced optics with eight measurement channels for fast reading
- Optimized light intensity via reference channel for enhanced performance

### INNOVATIVE

- Innovative LED lamp offers 10 times longer maintenance-free lifetime
- Makes lamp changes a thing of the past & helps to cut maintenance costs

### RELIABLE

- The Infinite F50 Robotic is designed for maximum reliability
- Integrated sensors monitor critical parameters such as plate loading, etc.
- Two year warranty and a tested reliability of > 100,000 plates



## Essential quality control with the MultiCheck™ QC package

The MultiCheck QC package for the Infinite F50 offers a fast and easy way to verify and document the performance of your microplate reader. It provides a system check appropriate for installation qualification (IQ) and operational qualification (OQ), which are essential to ensure reliable, valid measurement data and reader functionality over time.

## Convenient LIS option

The hand-held barcode scanner (LIS option) is a time-saving and convenient option that allows barcoded sample and plate IDs to be automatically transferred into Magellan software, and data exported to the appropriate Laboratory Information System (LIS).

# Green

# innovations.



## Discover how you can save money and go green with the Infinite F50 and Infinite F50 Robotic ELISA plate readers

### GREEN

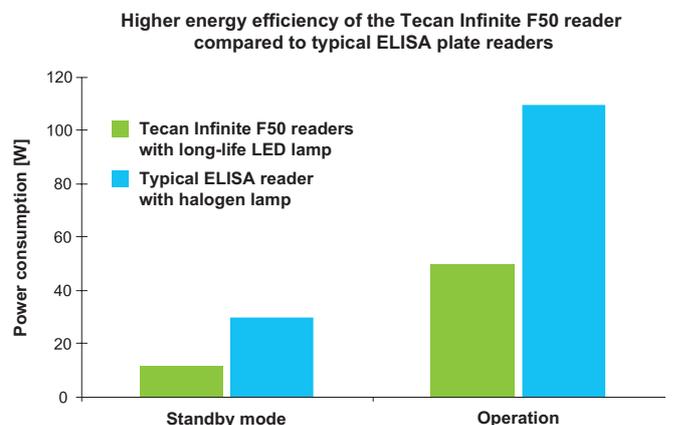
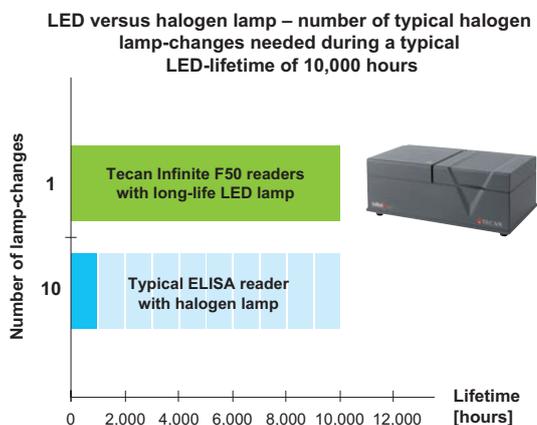
- 10 times longer maintenance-free lifetime of the innovative LED lamp
- 50% lower power consumption compared to typical ELISA readers
- Makes lamp changes a thing of the past and helps to cut maintenance costs
- No waste of electricity while waiting for lamp warm-up – just switch on and start reading

### RoHS

- Innovative design helps with the restriction of hazardous substances, such as lead, mercury, cadmium, hexavalent chromium and others
- Designed to meet the European directive 2011/65/EU RoHS for the reduction of hazardous substances, as well as China RoHS

### EFFICIENCY

- The Infinite F50 family's advanced design and high quality components make it possible to combine excellent performance with low weight
- The compact design and low weight increases transport efficiency and helps to lower CO<sub>2</sub> emissions compared to typical ELISA readers



## Infinite F50 and Infinite F50 Robotic – typical performance values

### General specifications

Detection mode	Absorbance
Light source	LED, self-calibrating
Photodetector	Silicon photodiodes
Plate type	96-well microplates (including strip-well microplates)
Measurement modes	Endpoint, kinetic and multi-label measurements
Measurement channels	8
Reference channel	1
Measurement range	0 – 4 OD
Resolution	0.0001 OD
Wavelength range	400 – 750 nm
Wavelength selection	Up to eight filters on wheel standard filters 405, 450, 492 and 620 nm**
Accuracy at 450 / 492 nm	
0.000 – 2.000 OD	≤ (0.5 % + 0.010 OD) typical***
2.000 – 3.000 OD	≤ (1 % + 0.010 OD) typical***
Precision / Reproducibility at 450 / 492 nm	
0.000 – 2.000 OD	≤ (0.5 % + 0.005 OD)
2.000 – 3.000 OD	≤ (1.0 % + 0.005 OD)
Linearity	
0.000 – 2.000 OD	≤ 1.0 %
2.000 – 3.000 OD	≤ 1.5 %
Shaking	Linear shaking in four different modes
Computer interface	USB
Dimensions Infinite F50 / Infinite F50 Robotic	Height: 13.4 cm (5.28 in) / 13.4 cm (5.28 in) Width: 34.7 cm (13.66 in) / 35.7 cm (14.07 in) Depth: 18.9 cm (7.44 in) / 19.1 cm (7.51 in)
Weight	< 3 kg
Power supply	External power supply: 100 – 240 V AC, 50 / 60 Hz, max. 1.2 A (auto sensing)

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\*together with Magellan Tracker software

\*\*additional filters available separately

\*\*\*Specifications are subject to change. Typical performance values represent the average observed factory tested values.

For product specifications refer to operators manual.

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