

# GEMINI

COMPACT MICROPLATE  
PROCESSOR



# TUBE IN – RESULT OUT

## FULLY AUTOMATED MICROPLATE PROCESSOR FOR LOW THROUGHPUT APPLICATIONS

- Total walk away system
- Flexible time management with LIS connectivity
- Modularity – open system
- Ease of use, installation and maintenance
- Assay performance with disposable tips
- High process safety with triple pipetting control
- Convenient programming of assay protocols
- Proven reliability
- The system is in compliance with the In Vitro Diagnostic Regulation (IVDR)/ Regulation (EU) 2017/746

### Reading

- Absorbance reader with up to 8 different filters
- Single or dual wavelength reading
- End point and kinetics
- Shaking

### Incubation

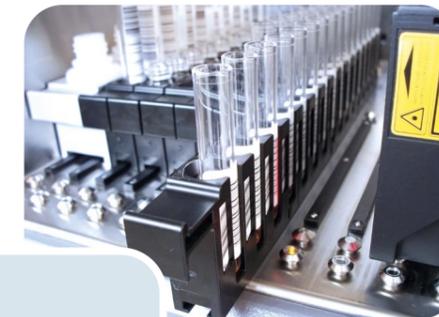
- Two independently controlled incubator chambers (up to 45 °C) with shaking (20 Hz)
- Three room temperature incubation chambers

### Washing

- 2 x 8-channel washer (aspirate and dispense)
- Three wash buffers
- Sweep mode, soak, top and bottom wash, variable pump speed

### Capacity and throughput

- Initial loading of up to 192 samples
- Continuous loading
- Two deep-well plate positions for predilution and/or archiving

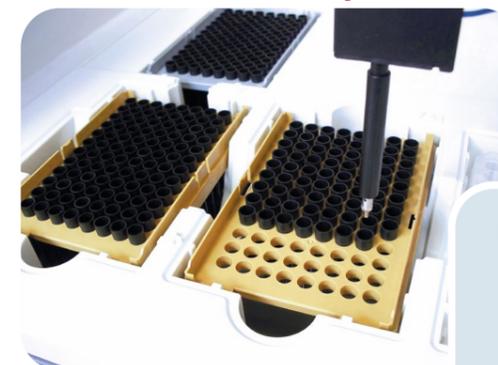
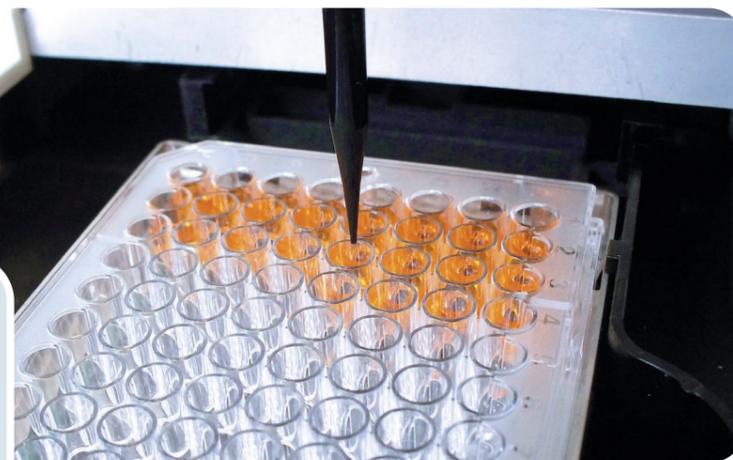


### Ease and flexibility

- Flexible scheduling of up to three plates
- Graphical assay protocol editor
- Combination of multiple assays on one plate
- Proven software reliability
- Bi-directional LIS connectivity, ideal with random access instruments
- Based on established EIA software platform with more than 4,500 placements worldwide

### Safety and in-process control

- Pipetting pressure monitoring
- Capacitive liquid level detection for optimal identification of fibrin clots and insufficient volume
- Colorimetric dispense verification
- Positive identification of barcoded samples and reagents



### Pipetting

- Liquid pipettor for disposable tips (300 µl or 1100 µl)
- Flexibly programmable for single pipetting, multiple pipetting, multiple dilution steps, mixing and archiving

# SPECIFICATIONS

## READER

- Photometric range: 0 to 3.0 OD
- Spectral range: 400 nm to 700 nm (up to 8 filters)
- Read time: < 15 sec single, < 30 sec dual
- Precision: 1 % CV at 1.0 OD
- Accuracy:  $\pm 0.005$  OD or 2.5 % (whichever is greater)
- Linearity: 0 to 2.000 OD  $\pm 1$  %

## PIPETTOR

- Min / max. volumes: 10  $\mu$ l to 300  $\mu$ l with 300  $\mu$ l tip  
301  $\mu$ l to 1000  $\mu$ l with 1100  $\mu$ l tip
- Precision (single dispense): < 3 % CV at 20  $\mu$ l  
< 3 % CV at 100  $\mu$ l
- Precision (multi dispense): < 10 % CV at 16 x 20  $\mu$ l  
< 3 % CV at 8 x 100  $\mu$ l
- Features: Pipetting pressure monitoring, capacitive liquid level detection, tip detection, mixing, multiple dilution steps, archiving

## CAPACITY

- Sample and reagent capacity: Up to 192 samples  
Flexible: e.g. 144 samples + 8 reagents + 16 controls

## INCUBATOR

- Temperature range: Up to 45 °C
- Temperature uniformity:  $\pm 1.5$  °C (with in-process temperature monitoring)
- Shaking: 20 Hz

*All values are achieved under optimal conditions and can vary depending on environmental conditions, instrument status and processing conditions.*

## WASHER

- Precision: 10 % CV at 300  $\mu$ l
- Residual volume: < 2.5  $\mu$ l in U-bottom (mean)  
< 4  $\mu$ l in flat bottom (mean)
- Wash buffer capacity: 3 wash buffers
- Modes: Sweep mode, soak, top and bottom wash, variable pump speed

## DIMENSIONS

- Width x Depth x Height
- 125 cm x 65 cm\* x 75 cm\*\*
- 49" x 26"\* x 30"\*\*

## EASY INTEGRATION – NO LIMITS

Additional functionality through middleware software

- Easy integration: Wide range of interfaces allows consolidation of results from other instruments
- Connects host: Provides smooth real time bi-directional communication between device and LIS
- Connects instruments: Operates with single or multiple GEMINI installations

\* w/o Waste Bag

\*\* Cover Closed

We are a member of the STRATEC Group | [www.diatron.com](http://www.diatron.com) | [sales@diatron.com](mailto:sales@diatron.com)  
Instrument is in development and not available for commercial sale in the USA.

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