

GEMINI – Two-Plate – Compact Microplate Processor

TUBE IN – RESULT OUT

The Gemini is a 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
- Disposable tips possess liquid level detection capabilities
- High process safety with triple pipetting control
- Convenient programming of assay protocols
- Proven reliability
- EN ISO 13485 and FDA QSR compliant

Key Features:

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 buffer bottles
- Sweep mode, soak, top and bottom wash, variable pump speed

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 3,000 placements worldwide



Safety and in-process control:

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

Capacity and throughput:

- Initial loading of up to 192 samples
- Continuous loading
- Three disposable tip rack positions
- Two deep-well plates positions for pre-dilution and / or archiving

Pipetting:

- Liquid pipettor for disposable tips (300 µl or 1100 µl)
- Flexible programming for single pipetting, multiple pipetting, multiple consecutive dilution steps and mixing

GEMINI Specifications

Dimensions

Depth 66 cm (26 in)
Width 97 cm (38.2 in)
Height 75 cm (29.5 in)

Sample and reagent capacity

Up to 192 samples
Flexible: e.g. 144 samples + 8 reagents + 16 controls

Reader

Photometric range: -0.1 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: ± 0.005 OD or 2.5% (whichever is greater)
Linearity: 0 to 2.000 OD ± 1%

Pipettor

Min / max. volumes: 10 µl to 300 µl with 300 µl tip
301 µl to 1000 µl with 1100 µl tip
Precision (single dispense): < 6% CV at 20 µl < 3% CV at 100 µl
Precision (multi dispense): < 10% CV at 16 x 20 µl < 5% CV at 8 x 100 µl
Features: Tip detection, mixing, multiple consecutive dilution steps, capacitive liquid level detection, aspiration pressure monitoring

Incubator:

Temperature range: Ambient +7°C up to 45°C
Temperature uniformity: ± 1.5°C (with in-process temperature monitoring)
Shaking: 20 Hz

Washer

Precision: 10% CV at 300 µl
Residual volume: <2.5 µl in U-bottom <4 µl in flat bottom
Wash buffer capacity: 3 wash buffers
Modes: Sweep mode, soak, top & bottom wash, variable pump speed

For further information call 1 800 701-7450

