

iEMS[®] Incubator/Shaker

The iEMS Incubator/Shaker is a high-performance microplate incubator and orbital shaker. It can be used for any microplate based assay requiring optimal incubation conditions up to 40°C.

Capacity up to 9 plates

The iEMS Incubator/Shaker is designed to handle up to nine 96-well plates, and yet only takes up a small amount of bench space due to its compact design.

Unique temperature uniformity

The iEMS Incubator/Shaker has an individual thermal microplate holder for each microplate. To eliminate temperature gradients and edge effects, microplates are heated evenly from all sides. This ensures reproducibility of the assay

wherever the sample is positioned on the plate. The iEMS Incubator/Shaker offers a temperature uniformity of less than 0.3°C across the entire microplate.

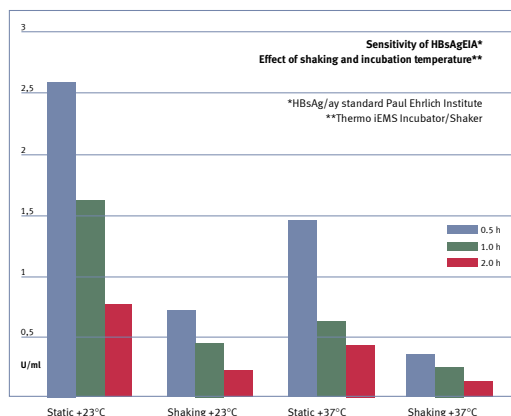
Orbital shaking for increased sensitivity

For effective mixing, the iEMS Incubator/Shaker incorporates a powerful variable-speed orbital shaker. With an orbit of 1.0 mm and speeds from 400 to 1400 rpm in 250 rpm increments, the shaker motion ensures efficient mixing of even very viscous liquids.

Improved sensitivity

Superior temperature control and efficient orbital shaking dramatically increase the sensitivity of EIA assays, as well as reducing incubation times. The detection limit of an HBsAg assay, for example, can be increased by a factor of two from 0.8 U/ml to 0.42 U/ml, simply by incubating at constant 37°C. Also when the sample is incubated at 37°C instead of at room temperature, the same sensitivity can be achieved in half the time.

The effective orbital shaking motion of the iEMS Incubator/Shaker increases the detection limit by a factor of three, from 0.8 U/ml to 0.24 U/ml, after a two-hour incubation.



Orbital shaking at a constant incubation temperature of 37°C increases the sensitivity and specificity of EIA assays and reduces incubation times.

