

# IKA

designed for scientists



## MATRIX Orbital Delta FP

/// Технический паспорт

The IKA Matrix Orbital  $\Delta$  FP is part of a new and powerful product family of thermoshakers available. IKA Matrix Orbital  $\Delta$  FP mixes, heats and has a universal holder for microtiter plates. Whether its blood samples, pharmaceutical agents, DNA/RNA samples or ELISA assays – samples with even the smallest volumes mix reliably and completely in all laboratory applications. No cross-contamination and an optimal mixing result.

In addition, IKA Matrix Orbital  $\Delta$  FP comes with numerous user-friendly features:

- Large and clear display with a convenient menu structure allows for intuitive operation



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- Stable quick lock for fast and easy change of inserts and attachments as well as automatic attachment detection
- Speeds of up to 2,000 rpm and shaker diameter of 3 mm ensure the liquid mixes quickly and effectively
- Two different speed modes for gentle heating of the samples
- Programmable ramps allow for automatic execution of mixing and heating tasks
- Smart speed adjustment according to insert, attachment and filling volume
- Aluminum die cast housing ensures secure positioning, excellent stability and everyday robustness



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## Технические данные

Траектория встряхивания	Орбитальная
Диаметр орбиты [mm]	3
Maximum load [kg]	0.3
Разрешенное время во вкл. состоянии [%]	100
Скорость мин.(регулируемая) [rpm]	300
Диапазон вращающего момента [rpm]	0 - 2000
Индикатор скорости	TFT
Отклонение скорости [ $\pm$ rpm]	30
Контроль диапазона скоростей	10 RPM Steps
Таймер	да
Дисплей таймера	TFT
Контроль времени мин. [s]	1
Контроль времени макс. [min]	6000
Режим работы	timer, continuous and program operation
Работа с микротитрационными планшетами	да
Кол-во микротитрационных планшетов	1
Диапазон нагревания температур [ $^{\circ}$ C]	Температура окр. среды +4 $^{\circ}$ - 100
Мощность нагрева [W]	100
Контроль нагрева	TFT
Колебание температур нагрева [ $\pm$ $^{\circ}$ C]	1
Temperature control accuracy [ $\pm$ $^{\circ}$ C]	1.0 (@ 20 $^{\circ}$ C ... 45 $^{\circ}$ C); 4.0
Temperature stability [ $^{\circ}$ C]	0.5
Temperature homogeneity [ $\pm$ $^{\circ}$ C]	0.5 (@ 20 $^{\circ}$ C ... 45 $^{\circ}$ C); 1.5
Heating rate [ $^{\circ}$ C/min]	18
Индикатор температуры	да
Number of PCR plates	1
Number of Deep Well Plates (DWP)	1
Размеры [mm]	216 x 147 x 351
Вес [kg]	9.2
Допустимая температура окружающей среды [ $^{\circ}$ C]	5 - 40
Допустимая относительная влажность [%]	80
Класс защиты согласно DIN EN 60529	IP 21
Разъем RS 232	да
Разъем USB	да
Напряжение [V]	100 - 240
Частота [Hz]	50/60
Потребляемая мощность [W]	240
Power input max. [W]	240
Fuse	2x T4A 250V