



designed for scientists



## MATRIX Orbital Delta F1.5

/// Data Sheet

IKA MATRIX is the new high-performance product family of thermal shakers. The IKA MATRIX Orbital  $\Delta$  F1.5 with fixed attachment mixes and heats 24 x 1.5 ml microcentrifuge tubes / reaction vessels. It is compatible with 1.5 ml EPPENDORF TUBES®\*. 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  $\Delta$  F1.5 comes with numerous user-friendly features:



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- Large and clear display with a convenient menu structure allows for intuitive operation
- Speeds of up to 1,500 rpm and shaker diameter of 3 mm ensure the liquid mixes quickly and effectively
- 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

\*Eppendorf Tubes® is a trademark of Eppendorf Group SE & Co. KG with no business or corporate relationship with IKA Werke GmbH & Co. KG.

#### Scope of delivery

- MATRIX Orbital Delta F1.5
- IKA PETTE vario 100-1000 µl

## Technical Data

Type of movement	orbital
Shaking stroke [mm]	3
Maximum load [kg]	0.3
Permissible ON time [%]	100
Speed min (adjustable) [rpm]	300
Speed range [rpm]	0 - 1500
Speed display	TFT
Speed deviation [rpm]	±30
Speed adjustment	10 RPM Steps
Timer	yes
Timer display	TFT
Time setting min. [s]	1
Time setting max. [min]	6000
Operating mode	timer, continuous and program operation
Number of microtiter plates	1
Heating temperature range [°C]	room temp. +4° - 100
Heat output [W]	100
Heat control	TFT
Set temperature resolution [°C]	±1
Temperature control accuracy [°C]	±0.5
Temperature stability [°C]	0.5
Temperature homogeneity [°C]	±0.5 (@ 20°C ... 45°C); ±1.5
Heating rate [°C/min]	11
Temperature display	yes
Number of reaction vessels	24x 1.5 ml
Dimensions (W x H x D) [mm]	216 x 158 x 351
Weight [kg]	9.2
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 21
RS 232 interface	yes
USB interface	USB-B
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	240
Power input max. [W]	240
Fuse	2x T4A 250V