

Mixing, heating, cooling – It's no longer a question of "either/or". The powerful MATRIX thermoshakers can do everything you need. You can achieve optimal mixing results with the smallest of volumes, whether it's blood samples, pharmaceutical agents, DNA / RNA samples or ELISA assays. In combination with IKA incubation shakers, centrifuges, pipettes and the Dry Block Heater, our thermoshakers facilitate an optimum workflow in the field of Sample Handling, Liquid Handling and Cell Handling.

## MATRIX ORBITAL DELTA PLUS

/// The thermoshaker with cooling feature

The MATRIX Orbital Delta Plus is the youngest member of the MATRIX family. This thermoshaker mixes, heats and cools samples in the milliliter range. This simultaneity ensures particularly good mixing and shorter reaction times. A speed range of up to 3000 rpm and a 3 mm shaking stroke contribute to controlled, rapid and even mixing to the most challenging samples.



### AWARD-WINNING DESIGN

The MATRIX Orbital Delta Plus has been awarded the coveted German Design Award 2021. That's because it is designed to sit on a sturdy mount, even with its minimal footprint. Its clear shape, smooth surface and inventive layout not only make this thermoshaker look good, but also makes it easier to use – as per the well-known IKA menu navigation.

### SIMPLY USER-FRIENDLY

There are countless attachments available for the MATRIX Orbital Delta Plus, all of which can be changed quickly and easily. The special attachment fixing system improves temperature transfer and the outer plastic casing ensures the users don't burn their fingers..

### ACCESSORIES FOR LIFE SCIENCE APPLICATIONS

All of the equipment in the IKA MATRIX range can be combined with the most varied of micro-titration plates, deep well plates, Eppendorf reaction vessels, PCR strips, Greiner tubes, micro-plates and cuvettes. The IKA ThermoCover prevents the formation of condensation on the vessel cover, meaning that the sample concentration remains constant. And a temperature sensor in the attachment ensures both accuracy and homogeneity.

**Matrix Orbital**

Ident. No. 0020025594

Mixing

① **Matrix Orbital Δ FP**

Ident. No. 0020025686

② **Matrix Orbital Δ F0.5**

Ident. No. 0020025656

③ **Matrix Orbital Δ F1.5**

Ident. No. 0020025666

④ **Matrix Orbital Δ F2.0**

Ident. No. 0020025676



Mixing & heating

③



TECHNICAL DATA	MATRIX ORBITAL	MATRIX ORBITAL Δ FP   F0.5   F1.5   F2.0
Type of movement	Orbital	Orbital
Speed range	300 – 3000 rpm	FP   F0.5: 300 – 2000 rpm F1.5   F2.0: 300 – 1500 rpm
Shaking stroke	3 mm	3 mm
Heating range	–	RT + 4 °C – 100 °C
Permissible shaking weight (incl. attachment)	0.3 kg	0.3 kg
Operating mode	Timer and continuous operation	Timer and continuous operation
Dimensions (W × H × D)	198 × 124 × 318 mm	FP: 216 × 147 × 351 mm F0.5: 216 × 149 × 351 mm F1.5 / 2.0: 216 × 158 × 351 mm
Protection class according to DIN EN 60529	IP 21	IP 21

**Matrix Δ+**

Ident. No. 0020100537

Heating &amp; cooling



Mixing, heating &amp; cooling

**Matrix Orbital Δ+**

Ident. No. 0020100525

**TECHNICAL DATA**

TECHNICAL DATA	MATRIX Δ+	MATRIX ORBITAL Δ+
Type of movement	–	Orbital
Speed range	–	300 – 3000 rpm
Shaking stroke	–	3 mm
Heating range	RT -30 °C – 110 °C	RT -15 °C – 100 °C
Permissible shaking weight (incl. attachment)	0.3 kg	0.3 kg
Operating mode	Timer and continuous operation	Timer and continuous operation
Dimensions (W × H × D)	216 × 127 × 351 mm	216 × 127 × 351 mm
Protection class according to DIN EN 60529	IP 21	IP 21



Product	Description	Ident. No.
---------	-------------	------------

ACCESSORIES THERMOSHAKERS

(A)	Matrix Cover	Cover	0030001253
(B)	Matrix Thermo Cover	Cover, heatable	0030001244
(K)	Matrix PCR 96 attachment	Attachment for 96 PCR plates	0030000853
(L)	Matrix PCR 384 attachment	Attachment for 384 PCR plates	0030000857
(J)	Matrix 0.5 ml attachment	Attachment for vials, 24 x 0.5 ml vials	0030000840
(G)	Matrix 1.5 ml attachment	Attachment for vials, 24 x 1.5 ml vials	0030000829
(F)	Matrix 2.0 ml attachment	Attachment for vials, 24 x 2.0 ml vials	0030000834
(E)	Matrix 5 ml attachment	Attachment for vials, 8 x 5 ml vials	0030000859
(H)	Matrix 12 mm attachment	Attachment for vials, 24 x 12 mm vials	0030000844
(D)	Matrix 15 ml attachment	Attachment for vials, 8 x 15 ml vials	0030000821
(C)	Matrix 50 ml attachment	Attachment for vials, 4 x 50 ml vials	0030000863
(I)	Matrix Cryo attachment	Attachment for vials, 24 x cryo vials	0030000848
(3)	Matrix 0.5 ml insert	Insert for 0.5 ml vials	0030001157
(2)	Matrix 1.5 / 2.0 ml insert	Insert for 1.5 / 2.0 ml vials	0030001158
(1)	Matrix PCR insert	Insert for 0.2 ml PCR vials	0030001159
(M)	Matrix plate attachment	Attachment for microtiter plates	0030000849

