



designed for scientists



IKA Matrix Delta Plus

/// Data Sheet

Matrix Delta plus heats and cools reliably with variable inserts. Whether blood samples, pharmaceutical agents, DNA/RNA samples or ELISA assays - reaction vials and plates with even the smallest volumes are reliably tempered in all laboratory applications.

In addition, Matrix Delta plus comes with numerous user-friendly features:

- Large and clear display with a convenient menu structure allows for an intuitive operation
- Reduced waiting time through fast heating and cooling rates of up to 5.5 °C/min (heating) or 2 °C/min (cooling, at set-point temperature between ambient temperature and 30 °C below ambient temperature)



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- Firm quick-release fastener for quick and easy changing of the inserts/attachments as well as an automatic attachment detection
- Automatic performance of heating and cooling tasks through programmable ramps
- Aluminum die cast housing ensures secure positioning, excellent stability and everyday robustness

The device is ideally suited for numerous applications in laboratories, such as:

- Tempering of samples
- Synthesis of cDNA
- Enzyme-catalysed linking of RNA or DNA (ligation)
- Gentle thawing of sample material
- Structural change of DNA, RNA and proteins (denaturation)
- ELISA assays



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Technical Data

Maximun load [kg]	0.3
Permissible ON time [%]	100
Timer	yes
Timer display	TFT
Time setting min. [s]	1
Time setting max. [min]	6000
Operating mode	timer, continuous and program operation
Working with microtiter plates	yes
Working temperature min. [°C]	room temp. -30
Temperature setting range min. [°C]	-10
Heating temperature max. [°C]	110
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
Heating rate [°C/min]	5.5
Temperature display	yes
Cooling Rate [°C/min]	2
Cooling Power [W]	72
embedded cooling unit	yes
Number of exchangable attachments	10
Fixed safety circuit [°C]	145
Dimensions (W x H x D) [mm]	216 x 127 x 351
Weight [kg]	9.5
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	yes
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	230