

GRADIENT THERMAL CYCLER

ALS-INS014



DESCRIPTION

Experience cutting-edge precision and efficiency with the ALS-INS014 Gradient Thermal Cycler, designed for seamless DNA amplification in your laboratory. This advanced device is equipped with the latest semiconductor technology, ensuring superior temperature uniformity and rapid cycling rates.

KEY FEATURES

- **Innovative Design:** The ALS-INS014 boasts a sleek, user-friendly interface with a compact size, making it an ideal addition to any lab setting.
- **Rapid Temperature Control:** Experience unparalleled heating and cooling rates of up to 4°C/s, ensuring your PCR reactions are both swift and accurate.
- **High-Definition Touch Screen:** Navigate through the intuitive interface with ease, using the 7-inch TFT high-definition full-touch color screen for quick file editing and real time temperature curve visualization.
- **Data Security and Management:** User login, rights management, and password protection ensure data integrity, while the device can store up to 1000 files for convenient access.
- **Customizable Hot Lid:** The unique heating lid design accommodates varying tube heights, with adjustable temperature settings to meet diverse experimental needs.
- **Gradient Functionality:** Optimize your PCR conditions effortlessly with the built-in gradient calculator, offering accurate annealing temperatures across different samples.
- **Real-Time Monitoring:** Track the gradient temperature distribution and sample temperature in real time, giving you complete control over your experiments.
- **Precision Temperature Control:** The device ensures temperature uniformity within $\pm 0.25^{\circ}\text{C}$ and offers a temperature accuracy of $\pm 0.20^{\circ}\text{C}$, providing precise and reliable thermal control for PCR application.

TECHNICAL SPECIFICATIONS

Specifications	Parameters
Model	ALS-INS014GTC
Temp. range	4~99.9°C
Sample capacity	96x0.2ml
Max. heating rate	4.5°C/s
Maxi. cooling rate	3.5 °C/s
Temp.uniformity	±0.25°C
Temp. accuracy	±0.20°C
Temp.display resolution	0.1°C
Temp. control method	Block/Tube
Gradient temp uniformity	±0.3°C
Gradient temp. accuracy	±0.3°C
Gradient temp. range	30-99.9°C
Gradient temp.difference range	0.1-30°C
Single step time range	1~59m59s(0 is forever)
Hot cover temp. range	30-110°C
Max. steps of the program	30
Program max cycle No.	99
Time increment/decrement	-599~+599s
Temp. increment/decrement	-9.9~+9.9°C
Program pause function	Yes
16°C Insulation	Forever
LCD	7 inches,800x480 Pixel
Program storage quantity	1000
Communication Interface	USB 2.0(extension)
Power supply	100-240V AC 6.6-3.1A 50/60Hz
Dimensions(mm)	W.185 x D.280 x H.160
Net weight	3.2kgs