

## UF-100 GENECHECKER™ Ultra-Fast Thermal Cycler

DNA Amplification, 12 Minutes is More than Enough!

The best tool to make your DNA amplification faster and easier

GENECHECKER<sup>™</sup> has adopted a special polymer chip (Rapi:chip<sup>™</sup>) which enables much faster thermal transfer to the samples when compared to conventional PCR tubes or plates. The thermal cycling mechanism of GENECHECKER<sup>™</sup> achieves 8 °C/sec ramping rate for both heating and cooling.

State of the art hardware technology achieves great functionality and cost effectiveness

Patented technical know-how is optimized in the design and production of our Ultra-Fast PCR machine. This enables any user to get Ultra-Fast, accurate results at a very affordable price. Making the UF-100 perfect for research, education, food and beverage or any laboratory.



Patented Chip design provides extremely rapid output—30 cycles in 12 minutes

Intuitive control with LED indicated Jog-Dial LCD Display

Innovative and compact Design

16 sample capacity which allows for plenty of efficiency

Innovative PCR unit at an affordable price

Features of the UF100



## **Specifications**

Operating Mechanism	Precise Control of Peltier Element	
Temperature Accuracy	± 0.5°C	
Temperature Uniformity	± 0.5°C (Well to Well)	
Temperature Stability	± 0.5°C	
Ramping up Rate	8.0°C / second	
Ramping down Rate	8.0°C / second	
Range of Temperature Setting	30 ~ 65°C (1.0°C Increment) for RT Step	
	20 ~ 99°C (1.0°C Increment) for PCR	
Sample Format	Polymer Based 3-Dimensional Chip*	
Number of Samples per Run	10 or 16	
Required Sample Volume	10µl	
Typical PCR Duration	Approx. 12 minutes for 30 cycles (without RT Step)	
Display	4 Line Text LCD	
Integrated Memory	Saves up to 12 protocols	
Power	AC 100-230V/50/60Hz (Input Power : DC 12V)	
Power Consumption	120 W	
Dimension	200mm (w) x 200mm (d) x 127mm (h)	
Weight	Instrument : 3.2kg (Instrument Only)	

## **Ordering Information**

Cat. No.	Description	Pack
001100	Model UF-100 GENECHECKER <sup>®</sup> Ultra-Fast Thermal Cycler	1 SET

Accurate Thermal Systems 4104 Sylon Blvd, Haineport, NJ 08036 Phone: 609-326-3190 email: sales@accuthermal.com web: accuthermal.com **1. LCD Display** - 4 line text LCD offers clear identification while protocol setting and status monitoring

**2. MENU button** - Main menu screen is displayed when this button is pressed from initial screen. Displayed screen moves to previous step when this button is pressed

**3. Jog-Dial** - Rotating jog-dial in clockwise direction moves cursor on the display down (right) or increases set values. Rotating jog-dial in counter-clockwise direction moves cursor on the display up (left) and decreases set values. Pressing jog-dial selects the menu where cursor is located

**4. LED Indicator** - LED indicator is illuminated in two different colors - blue and red. Blue LED indicates that the instrument is idle and ready for use. Red LED indicates that the instrument is in use, i.e. PCR cycle is being performed. LED is turned off when prompted PCR cycles are finished

**5. RUN/STOP button** - Selected PCR protocol is executed when this button is pressed. Currently performed PCR cycle is immediately stopped when this button is pressed while the instrument is running

**6. Chip Presser** - Automatically presses the sealing tape to the upper surface of chip when the drawer is closed

**7. Heating Plate** - The area where the chip is loaded for the PCR run. The Flat surface is heated and cooled during thermal cycling

**8. Air Ventilation Holes** - The slats where the air flows into the instrument to help the thermal regulation

**9. Chip Drawer** - This is the module that inserts the chip into the instrument. It is a mechanically stable structure with a robust design to offer soft movement and trouble free use.

**10. PUSH bar** - The Chip drawer is gently opened and the upper sealing cap on the heating plate is automatically lifted when this bar is softly pressed.

**11. Groove for Easy Handling** - This part is to enhance the portable characteristics of this light, compact instrument.

