

GENECHECKER®

UF-300 Real-time PCR System

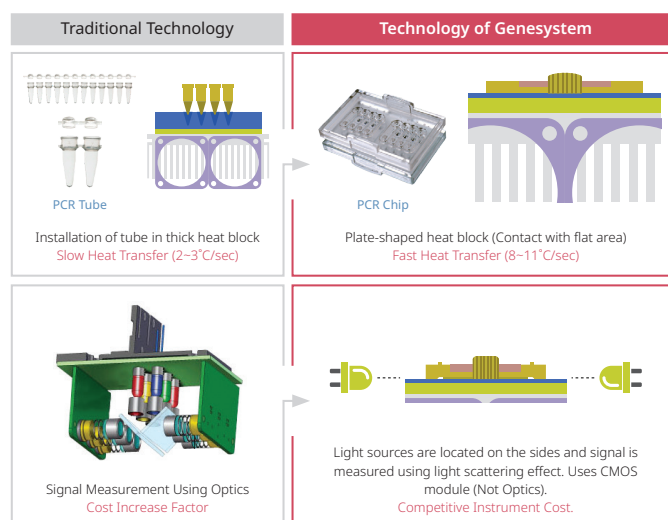


Fast, Compact and Intuitive Platform for Point-of-care Molecular Diagnostics

- Patented chip based reaction provides rapid output- "40 Cycles in 20 Minutes".
- Intuitive user interface (LCD touch panel) makes the test simple and easy.
- Small footprint of the platform makes it ideal for point-of-care testing applications.
- DC driven operation with low power consumption (Battery operation is possible.)
- Improved temperature accuracy and uniformity to meet the requirements in diagnostics.
- The model with dual detection channels (FAM/ROX) is available.

Innovative platform to make your PCR diagnostics faster

Long turn around time of PCR test and its bulky and heavy instrumentation have been the key factors limiting the spread of this highly precise and sensitive detection method in point-of-care diagnostic applications. Genesystem invented a microfluidic chip based PCR method associated with compact and sophisticated hardware mechanism which dramatically reduces the TAT of PCR testing down under 20 minutes. **GENECHECKER®** platforms adopted proprietary polymer chip (**Rapi:chip™**) which enables even faster thermal treatment of the samples in it than the case of using PCR tubes at conventional PCR instruments. The thermal cycling mechanism of **GENECHECKER®** achieves 8°C/sec ramping rate for both heating and cooling. The unique test format and state-of-the-art hardware technology of **GENECHECKER®** platform makes the PCR tests faster than ever.



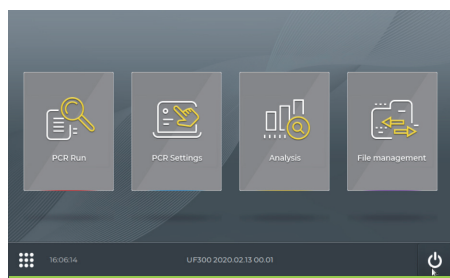
Integrated touch panel user interface for intuitive controls

GENECHECKER® UF-300 real-time PCR system has touch panel interface on the top so that users can intuitively set the parameters and instantly run the tests. This 8 inch sized panel is made of TFT display to provide brighter view and faster response.

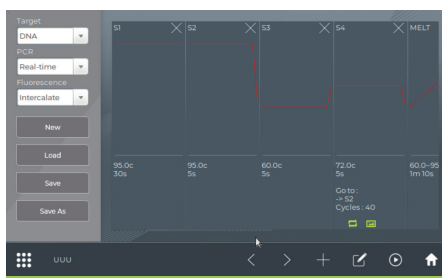
Improved instrument performance for delicate diagnostic application

While it maintains its unique performances of ultra-fast reactions, **GENECHECKER®** UF-300 real-time PCR system offers improved temperature accuracy and uniformity. This platform has dual detection channels (FAM/ROX) for the application demanding internal controls of the test.

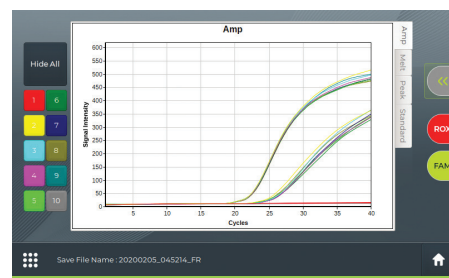
Intuitive user interface makes the test simple and easy.



Main screen consists of four simple menu which can be intuitively chosen and used.



Test protocols can be intuitively programmed and easily reviewed by user.



For easy analysis, real-time reaction curves are displayed as the same format of other real-time PCR instruments.

Specification

Operating Mechanism	Precise control of peltier element
Temperature Accuracy	$\pm 0.2^{\circ}\text{C}$
Temperature Uniformity	$\pm 0.2^{\circ}\text{C}$ (well to well)
Ramping Rate	$8^{\circ}\text{C} / \text{second}$
Range of Temperature Setting	$1 \sim 99^{\circ}\text{C}$ (0.1°C resolution)
Sample Format	Polymer based 3-dimensional microfluidic chip
Number of Sample per Run	10
Reaction Volume	$10\mu\text{l}$
Method of Detection	Measurement of fluorescence signal using CMOS module
Display and User Interface	7 inch TFT display capacitive touch panel
Type of Excitation	High brightness LED
Detection Channel	FAM and ROX
Emission Wavelength	FAM : 472 nm / ROX : 575nm
Power	AC 100-240V, 50/60Hz Input / DC 12V Output(MAX 2.0A)
Current Consumption	Max. 2.0A
Connectors	USB Type A 2 ports
Dimension	$218(\text{w}) \times 200(\text{d}) \times 142(\text{h}) \text{ mm}$
Weight	3.3 kg

Ordering Information

Catalog Number	Description
1399100200	GENE CHECKER UF-300 Real-time PCR System
1699100500	Optional Power Cable for Car Cigarette Power Socket / 1 SET
9699100100	Rapi:chip™ 10-well PCR Chip for GENE CHECKER UF-150, Standard Pack / 48 PK
9699100101	Rapi:chip™ 10-well PCR Chip for GENE CHECKER UF-150, Medium Pack / 384 PK
9699100102	Rapi:chip™ 10-well PCR Chip for GENE CHECKER UF-150, Large Pack / 768 PK