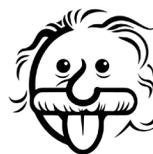# FastGene®UltraCycler

Predicted Well Temperatures °C

FastGene® UltraCycler

The FastGene® UltraCycler combines cutting edge temperature control technology with a stylish and compact footprint, resulting in a robust all-day, everyday performer. The 7"-touchscreen shows the very easy-to-use, yet powerful, software. It comes packed with preprogrammed assays and programming new assays could not be easier.

The FastGene® UltraCycler's internal storage can store thousands of assays and up to 99 users with password protection, as well as enabling the storage and loading of assays on external storage media through USB 2.0.

Heated Lid Evaporation Control
Heated lid temperature range of 60 °C to 115 °C
Condensation control with automatically applied pressure

ALBERT
PCR configuration assistent
Program a complete PCR assay in just a few seconds!

Powerful thermal engine
Very precise heating/cooling with ± 0.5 °C accuracy over full range and less than ±0.1 °C at 60 °C.
Quick heating rate of 7 °C/sec and cooling rates of 5 °C/sec
Temperature Graphing

Preprogrammed assays
Gradient PCR
Touch Down/Up
Long Range
Program Pauses

Ordering Information

Cat.No.	Product	Content
FG-TC01	FastGene® UltraCycler Gradient	Cycler, silicon mats, stylus
FG-TC02	FastGene® UltraCycler Uniform	Cycler, silicon mats, stylus

Key Features

Advantage of gradients
Gradient over a range of 24 °C
Calculation of the exact temperature in each column
Optimal annealing temperatur

7" Touchscreen
User accounts can be secured with password
Easy to use and intuitive software
Save assays on internal harddrive or on USB-sticks

USB 2.0
For USB-sticks or USB-mouse

190 mm

285 mm

180 mm

! CAUTION !

HOT

DO NOT TOUCH

PCR File Manager

Manual Incubation

PCR Program Editor

FastGene®

Configuration

4:53 PM
Thursday, October 09, 2014

FastGene® UltraCycler

- Ultra precise temperature control

- PCR programming assistant

- Preprogrammed assays, e. g. touchdown and long range PCR

- Temperature range of 4 °C to 99 °C

- Temperature uniformity of typically < ±0.1 °C at 60 °C

- Gradient function available (FG-TC01)

- Robust components

FastGene® UltraCycler

Round edges surround the brilliant 7 inch touchscreen, small footprint hiding the powerful engine, a lid, with its one hand opening function, which fits perfectly into the body, completes this beautiful, elegant and modern design.

Details

- Stylish metalic grey front combined with a metal body

- 7" Touchscreen

- Live graphing showing each step of the assay

- Very compact footprint

FastGene® UltraCycler

The temperature regulation of the FastGene® UltraCycler enables a temperature gradient of 24 °C across 12 lanes. With the temperature calculator a very precise determination of the temperature of each lane enables the rapid determination of the optimal primer annealing temperature

Details

- **Up to 24°C difference**
- **Temperature calculator**
- **Easy setup using *Albert* - the PCR assistant**

FastGene® UltraCycler

The software was designed having the aim to be as easy as possible to be used. Having said that, advanced features, fully manual programmation and preprogrammed assays, e. g. Touchdown or long range PCR are available.

Details

- User accounts with password login
- Very easy to use software
- Load & Save protocols on USB-sticks
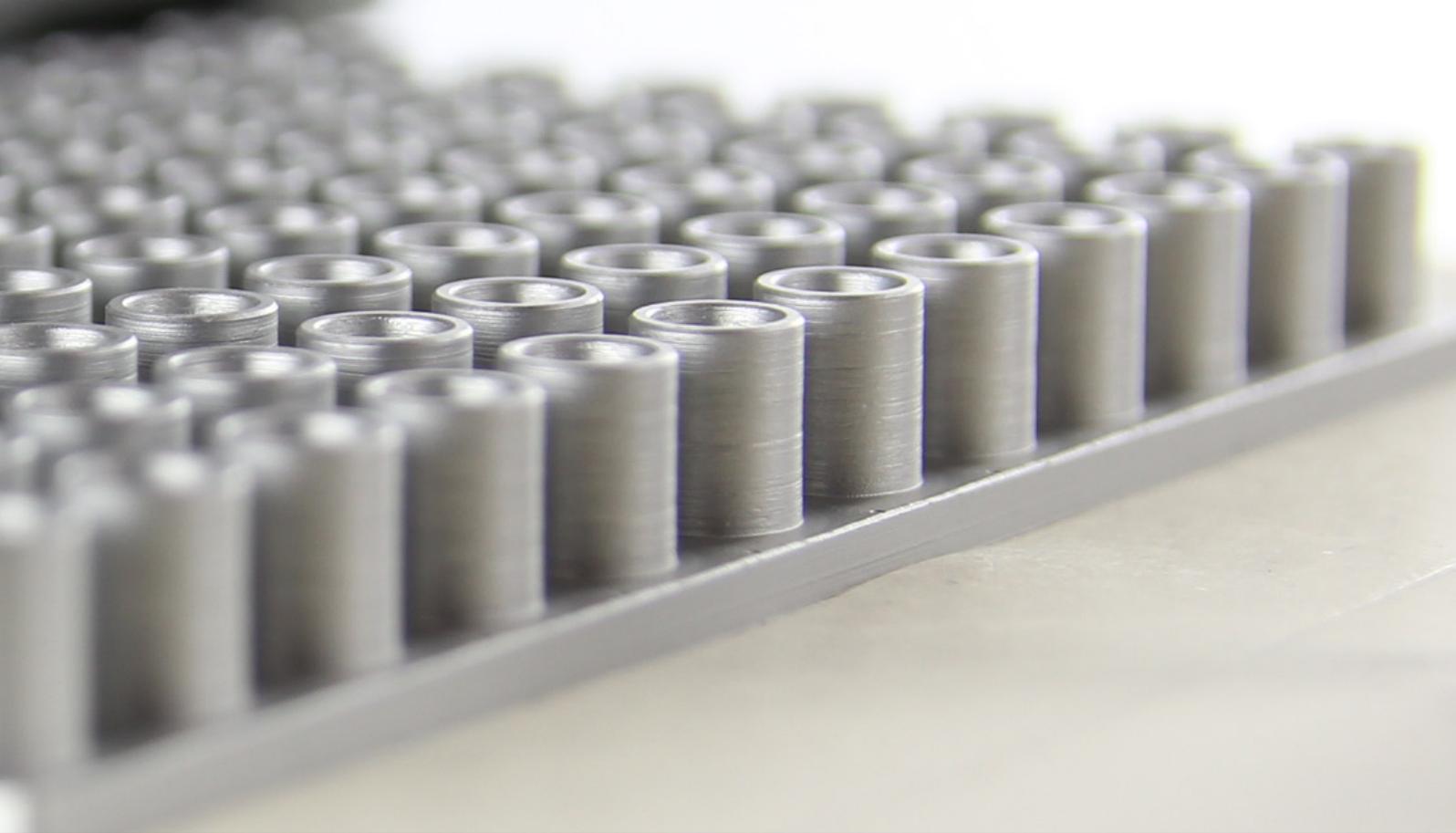
FastGene® PCR Plastic

Perfect Combination

Lab plastic play a major role in the reproducibility of PCR experiments. The FastGene® PCR plastic is made of the highest quality. Each batch is quality checked and certified free of DNase and RNase. The specially tight lid lock mechanism completely prevents evaporation.

Details

- **Highest quality**

- **No DNA Absorption**

- **Plastic made in Japan**

- **Single tubes**

- **8 well strips**

- **96 well plates**

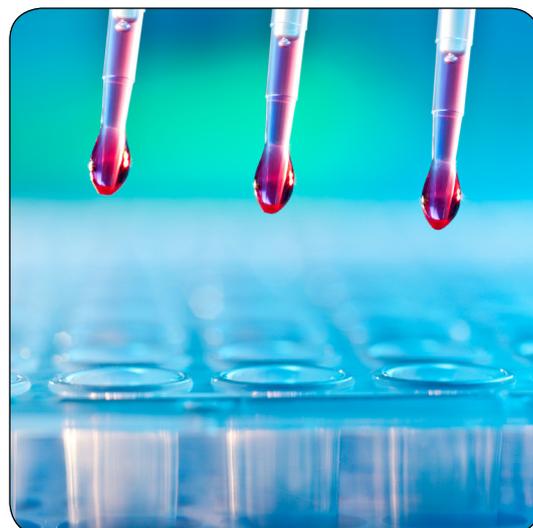- **384 well plates** (not compatible with the FastGene® UltraCycler)

FastGene® PCR Plastic

No DNA Absorption

DNA absorption of plastic could lead to considerable changes in the PCR. Hence, we have tested the DNA absorption at 4°C, 37°C and 65°C. No DNA absorption was observed. Find the results on our website at

www.nippongenetics.eu

Ordering Information

Single tubes

Cat.No.	Product	Content
FG-021F	FastGene® Single tubes with flat lid	1000
FG-021D	FastGene® Single tubes with domed lid	1000

8 Well-Strips

Cat.No.	Product	Content
FG-028	FastGene® 8-well strips without lid	120
FG-008FC	FastGene® 8-well lids - flat	120
FG-008DC	FastGene® 8-well lids - domed	120
FG-016FC	FastGene® 8-well strips with detached flat lid	120
FG-016DC	FastGene® 8-well strips with detached domed lid	120
FG-088WF	FastGene® 8-well strips with attached flat lid	120
FG-088WD	FastGene® 8-well strips with attached domed lid	120

96 Well plates

Cat.No.	Product	Content
FG-170225	FastGene® non-skirted 96-well plate	25 Plates
FG-180230	FastGene® full-skirted 96-well plate	30 Plates
FG-190250	FastGene® semi-skirted 96-well plate	50 Plates
FG-200250	FastGene® semi-skirted 96-well plate - ABI-style	50 Plates
FG-03890	FastGene® semi-skirted 96-well plate -"Fast-PCR"	25 Plates

384 Well plates

Cat.No.	Product	Content
FG-0384P	FastGene® semi-skirted 384-well plate	50 Plates
FG-0384MS	FastGene® silicon mat -"soft"	10 Mats
FG-0384MH	FastGene® silicon mat -"hard"	10 Mats

Technical Specification

Technology	High performance active heating and cooling using 6 quality peltier elements with 3 temperature sensors
Temperature range	4 °C – 99 °C
Temperature Accuracy	±0.5 °C over full range, typically < ±0.1 °C at 60 °C
Uniformity	±0.3 °C, 30 seconds after target (range 40 °C – 90 °C), typically < ±0.1 °C at 60 °C
Temperature Resolution	0,1 °C increments
Heating/Cooling rate	7 °C/sec peak heating, 5 °C/sec peak cooling between denat & anneal (block)
Well Configuration	96-well block supporting: 0.2 mL tubes or strip tubes with flat or domed caps;
	96-well high-or low skirt plates with strip caps, adhesive cover, or oil overlay
Condensation Control	Automatic utilising applied pressure heated lid
Heated Lid Temperature Range	60 °C – 115 °C
Dimensions	180 x 285 x 190 mm (W x D x H)
Weight	5,5 kg
Electrical	100-240V, 50/60 Hz
External Connectivity Interface	USB interface to Windows based PC
	USB host port – file transfer to and from USB memory stick – mouse/keyboard connection
Display	7-inch Widescreen Colour Touch Display
Software	Supplied with unlimited user licenses, Free upgrades available
Internal memory	256 MB, enough for 10,000+ saved profiles
Functionality	24 °C Temperature gradient, Touch Down/Up, Long Range, Program Pauses, Temperature Graphing, On-screen Help, User Accounts, Profile Load and Saving, Manual Mode, USB File Transfer, Post run reporting, Auto restart and more
Included Accesories	Power Cable, User Manual (downloadable PDF), Touch Screen Stylus