

ABL

Advanced
Biological
Laboratories

Life Science

UltraGene qPCR instruments



Efficient & Cost-effective Real Time PCR systems



Providing Lab Efficiency for Optimized Patient Monitoring

PRODUCT OVERVIEW



ULTRAGENE 48E



ULTRAGENE 96R

 **Flexible use**

- **Up to 48 / 96 samples / run**
- **UltraGene qPCR System can be installed in three configurations :**
 - ❖ Co-located (with PC control)
 - ❖ Standalone (PC free)
 - ❖ Networked configuration
- 7" LCD touch screen
- Data can be exported by USB and analyzed on PC
- USB port update software & firmware

PRODUCT OVERVIEW



	ULTRAGENE 48E
Sample capacity	48
Consumables	0.2ml 8-strip tubes, 0.2ml PCR single tube (Optical flat cap, clear tube)
Gradient Range	1°C-40°C
Gradient block	8 row
Special temperature protocol	Gradient PCR, Long PCR, Touch Down PCR
Fluorescent channel	4
Reaction Volume	5-100ul
Power usage	AC 100 to 125V / 200 to 240V (50/60Hz)
Communication Port	1 ethernet and 2 USB
Footprint(W*D*H)	260mmX400mmX260mm

PRODUCT OVERVIEW



	ULTRAGENE 96R
Sample capacity	96
Consumables	0.2ml 96-well Plates (unskit); 0.2ml 8-strip tubes, 0.2ml PCR single tube (Optical flat cap, frosted, white tube)
Gradient Range	1°C-40°C
Gradient block	
Special temperature protocol	Gradient PCR, Long PCR, Touch Down PCR
Fluorescent channel	4
Reaction Volume	10-100ul
Power usage	AC 100 to 125V / 200 to 240V (50/60Hz)
Communication Port	1 ethernet and 2 USB
Footprint(W*D*H)	355 mmX480mmX485mm



Fast & Uniform heating system

- Lid with constant temperature & isopiestic pressure
- Electrical controlled elevating & automatic locked platform
- Heat pipe technology for thermo block => maximized temperature homogeneity & inter-well, inter-cycle reproducibility
 - ❖ Heating rate : 8.0°C/s
 - ❖ Cooling rate : 5.5°C/s
 - ❖ Temperature accuracy : $\pm 0.1^\circ\text{C}$
 - ❖ Temperature uniformity : $\pm 0.1^\circ\text{C}$

High sensitive & Precise optical

- High sensitivity & wide dynamic range of fluorescence detection system
- Fast & precise mechanical scanning structure => eliminate edge effect, no need for ROX calibration
- Fluorescence excitation by a high-intensity & long-life LED
- Highly fluorescence transmittance, minimize fluorescence channel crosstalk
- 4 fluorescence channels

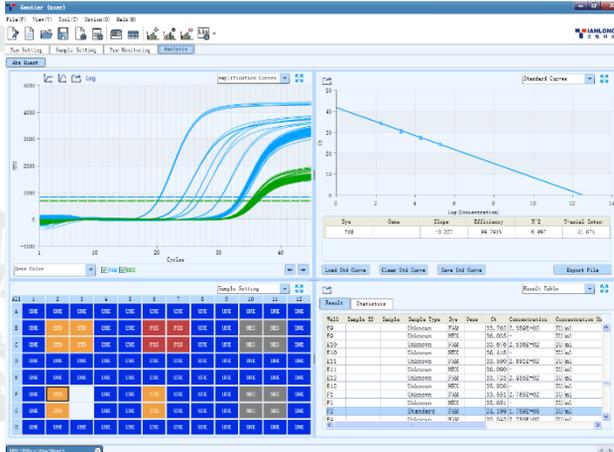
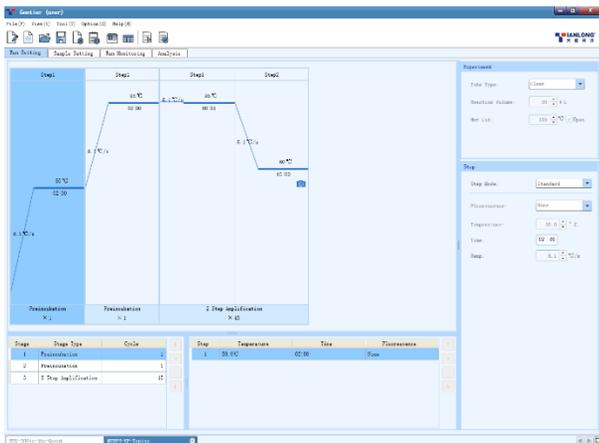
CH1	CH2	CH3	CH4
FAM	HEX	Texas Red	Cy5
SYBR Green I	VIC	ROX	
SYTO 9	TET		
EvaGreen	JOE		
LC Green			

PRODUCT FEATURES



Easy-to-use software

- Friendly interface & Clearly functional modules design



- Instrument management, Experiment management & Data transmission

The screenshot shows the 'Instrument Management' window. It features a table of instruments and a 'Details' section for a selected instrument.

Model	Name	Serial No.	Remarks	IP Address	Default
Gentier 96E	GENTIER96	TLO0000000		192.168.22.10	✓
Gentier 48E	GENTIER48	TLO0000001		192.168.23.10	

Buttons: Add, Edit, Delete, Set as Default Instrument

Details for GENTIER96:
Name: GENTIER96
IP Address: 192.168.22.10
Model: GENTIER 96E
Serial No.: TLO0000000
Version No.:
Master Control:
Optics:
Thermology:
Driver:
Status: Unknown
Stage: --/--
Cycle: --/--
Step: --/--
Remaining Time: --

The screenshot shows the 'File Transmission' window. It displays a list of files for transmission, categorized into 'Local File' and 'Instrument File'.

Local File	File Name	Modify Time	Type	Size
10IU-20160930135721	10IU-20160930135721	2016/11/23 18:18	TLPD	90 KB
Abs Quant 001.tlpd	Abs Quant 001.tlpd	2017/2/17 15:3	TLPD	87 KB
End-piont Test 006.tlpd	End-piont Test 006.tlpd	2016/12/1 18:2	TLPD	94 KB
Genotyping Test 005.tlpd	Genotyping Test 005.tlpd	2017/2/20 16:2	TLPD	94 KB
HPV-20161125153100	HPV-20161125153100	2016/11/30 14:14	TLPD	94 KB
HRM Test 004.tlpd	HRM Test 004.tlpd	2017/2/20 15:5	TLPD	542 KB
Melting Curves - 2016	Melting Curves - 2016	2017/2/15 15:4	TLPD	542 KB
Melting Curves Test 00	Melting Curves Test 00	2017/2/20 15:1	TLPD	542 KB

Instrument File	File Name	Modify Time	Type	Size
user-20170221092420	user-20170221092420	2017/2/21 9:29	TLPD	13 KB
user-20170221091346	user-20170221091346	2017/2/21 9:21	TLPD	15 KB
user-20170220172625	user-20170220172625	2017/2/20 17:2	TLPD	11 KB
user-20170220171759	user-20170220171759	2017/2/20 17:1	TLPD	11 KB
user-20170220171148	user-20170220171148	2017/2/20 17:1	TLPD	8 KB
user-20170220154532	user-20170220154532	2017/2/20 15:4	TLPD	11 KB
user-20170220152059	user-20170220152059	2017/2/20 15:3	TLPD	4 KB
user-20170220152059	user-20170220152059	2017/2/20 15:2	TLPD	11 KB

Buttons: Refresh

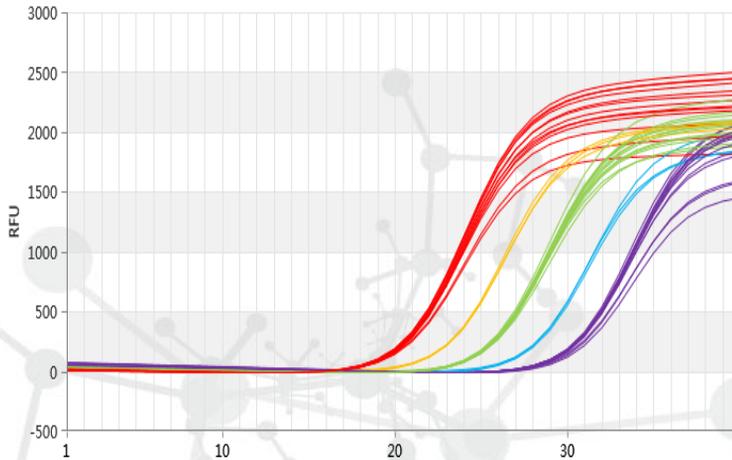
Data Transmission

PRODUCT FEATURES

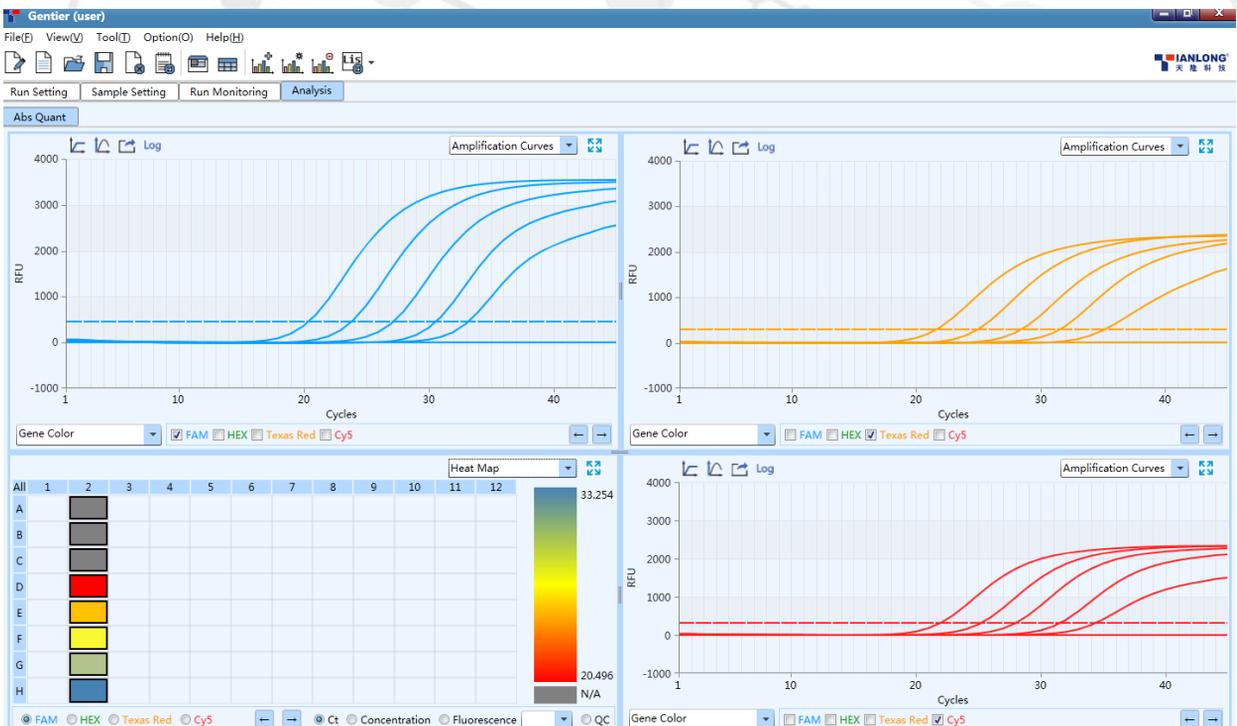


Quality data

➤ Gradient diluted sample uniformity



➤ Multiplex PCR gradient samples uniformity



COMPARE CHART



Specifications	7500	StepOne Plus	Light Cycler 480 II	CFX 96 Touch	Light Cycler 96	Quant Studio 5	<i>UltraGene</i>
Manufacturer Distributor	ABI	ABI	Roche	Bio-rad	Roche	ABI	ABL
Sample Capacity	96	96	96/384	96	96	96/384	96
Consumable (mL)	0.2	0.1	0.1	0.2	0.1	0.2/0.1	0.2
Max Heating Rate (°C/s)	2.5	4.6	4.4	5.0	4.4	6.5	6.1
Temperature Accuracy (°C)	0.5	0.25	/	0.2	0.2	0.25	0.1
Temperature Uniformity (°C)	±1.0	±0.5	±0.1	±0.4	±0.2	±0.4	±0.1
Thermal Gradient	×	×	×	√	√	√	√
Flourescence Channels	5	4	5	6	4	6/5	6
Touch Screen	NO	6	NO	7	10.4	7	10.4
Excitation Source	Halogen	LED	LED	LED	LED	LED	LED
Launched Time	2004	2007	2008	2009	2012	2015	2017

* Ming Li et al. (2017). "Performance verification and comparison of TianLong automatic hypersensitive hepatitis B virus DNA quantification system with Roche CAP/CTM system". World Journal of Gastroenterology. 23(37): 6845-6853

REFERENCES & CONTACT



Name	Reference	Samples max/run	Channel	Gradient
Ultragene qPCR system - 48 samples format - 4 channels with Gradient	149A48	48	4	Yes
Ultragene qPCR system - 96 samples format - 4 channels with Gradient	149A29	96	4	Yes



- Advanced Biological Laboratories S.A.
- 52-54 avenue X Septembre, 2550 Luxembourg, Luxembourg
- contact@ablsa.com
- <https://www.ablsa.com>
- TEL : (+352) 26 38 96 761
- FAX : (+352) 26 38 96 76 31

