



NeoReal- RealTime

PCR System

NB-12-3028-1

NB-12-3028-2

NB-12-3028-3

## NeoReal- RealTime PCR System 2000A/ 2000B/ 2000C

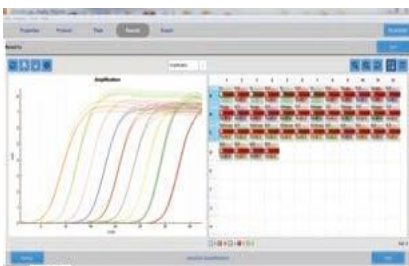
#Cat: NB-12-3028-1

#Cat: NB-12-3028-2

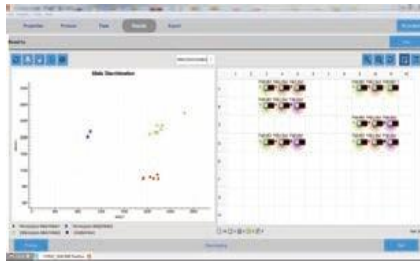
#Cat: NB-12-3028-3



### Software Function



1. Connection via an Ethernet cable or via router.
2. Pre-calibrated optics allow you to start using the instrument immediately, no additional calibration is required.
3. Quality control (QC) on data automatically, ensuring reliability of analysis results.
4. Graphical display of protocols, default templates, and real-time running status.
5. Simple and intuitive program, easy to use, without prior reading the user guide thoroughly.
6. PCR protocols can be run via a computer network or in the stand-alone mode (using a USB flash drive)
7. Real-time monitoring of amplification curve or melt curve via the 10" display and touch screen.
8. Intuitive qPCR plate setup.
9. Thermal gradient capability with 12 columns for optimizing PCR reaction protocol.
10. Protocols and plate setups can be saved as templates for future use.
11. Multitasking software, able to analyze multiple experiments at the same time.



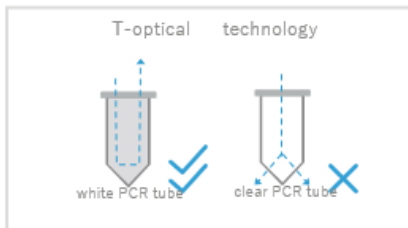
12. Varieties of Data Analysis Methods are include.
  - (1) Standard curves for absolute quantification
  - (2) Melt-curve to verify product identity
  - (3) Relative quantification for gene expression analysis, with multiple reference genes & amplification efficiency correction
  - (4) Allelic discrimination (SNP Genotyping) using two allele-specific probes, with automated calling & quality-value assignment
  - (5) Presence/Absence (Plus/Minus) assays with/without internal positive control (IPC) for pathogen detection
13. A variety of algorithms are included, such as auto-baseline, manual-baseline, auto-threshold, manual-threshold, amplification efficiency (E), able to streamline data analysis.
14. Export results to .xls, .txt(format).

## Main Advantages



### Imported Semiconductor Chip

Top brand Peltier elements from Marlow (U.S.A) adopted, ensure long life of 1,000,000 cycles and fast ramping rate up to 6°C/s.



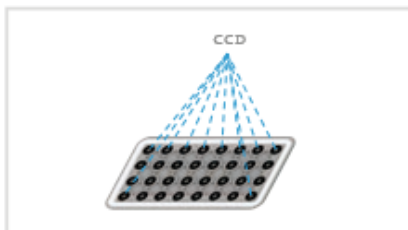
### T-Optical Technology

T-optical technology, reduce background noise, improve fluorescence signal sensitivity and signal to noise ratio.



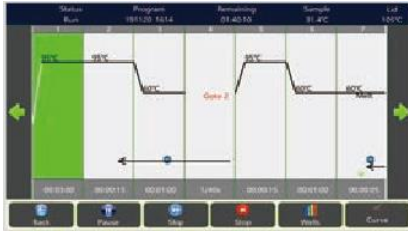
### Articulating display screen

The angle of display could be adjusted to the best view.



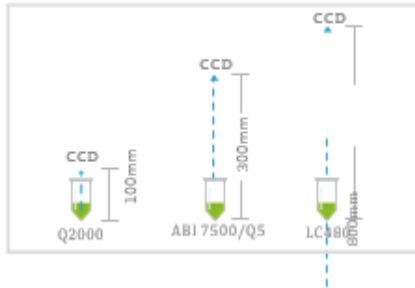
### Synchronous Detection

Simultaneous detection of wells, not in sequence.



## Self-Contained Touch Screen

Users could view qPCR process and run PCR protocol through self- contained 10" TFT LCD and touch screen.

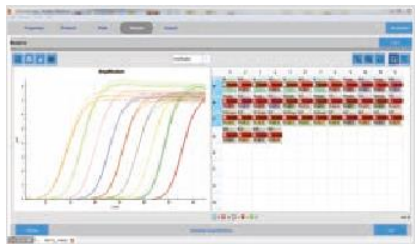


## Patented Optical Design

Innovative SSLP CCD imaging technology for qPCR, avoiding more moving parts like overheat, wear and off-center. Not optical fiber based, avoiding break and block by dust.

## Long life LED

Long life LED lamps to excite fluorescence, no need for replacement in the future.



## Gradient Function

Sample wells with temperature gradient function, convenient to optimize PCR conditions.

## Remote Control

Equipped with "Optimum qPCR Design & Analysis Software" for remote operation of instruments and analysis of results.



## Drawer Design

The drawer design of sample block, makes it easier to pick and place PCR tubes and plates.

## Lifetime Free for Software Upgraded

"Optimum qPCR Design & Analysis Software" could be upgraded for free.

## Detailed Parameters

Model	NB-12-3028-1	NB-12-3028-2	NB-12-3028-3
<b>Instrument Performance</b>			
Sample Block Capacity	96 Wells*0.1ml		
Reaction Volume	10~50uL (recommend 20μl)		
Tubes Option	White PCR tubes or strips or 96 well PCR plate, whit optical flat cap		
Heating and Cooling Technology	New generation Peltier technology allow 1,000,000 cycles		
Control Methods	Operated via PC or self-contained touch screen on instrument		
Optical System	Innovative SSLP CCD imaging technology		
Display	10" Color TFT LCD and Touch Screen		
Max. Number of Programs	Max.15,000 programs onboard, unlimited storage of protocols with USB flash drive		
PC Connection (EXTRA Option)	Remote PC Control to manage multiple units across the LAN network		
<b>Temperature</b>			
Block Temp.Range	0°C~105°C		
Max.Heating Rate	6°C/sec		
Max.Cooling Rate	5°C/sec		
Temp.Uniformity	≤±0.2°C at 90°C		
Temp.Accuracy	≤±0.1°C ( 10 seconds after reach 90°C)		
Display Resolution	0.1°C		
Heat Lid Temp.Range	30°C~112°C		
Gradient Range	30°C ~ 100°C		
Temp.Differential Range	1°C ~ 42°C		
<b>Fluorescence Detection</b>			
Excitation	Long life LED lamps		
Detection	CCDs		
Dynamic Range	1~10 <sup>10</sup>		
Sensitivity	≥1 copy		
Calibrated Dyes at Installation	F1: FAM/ SYBR Green F2: VIC/ HEX/ TET* (Reserved)/ JOE/CY3	F1: FAM/ SYBR Green F2: VIC/ HEX/ TET*(RESERVED)/JOE /CY3 F3: ROX/ TEXAS-RED /TAMRA*(Reserved) F4: CY5/Quasar670	F1: FAM/SYBR Green F2: VIC/HEX/TET* (Reserved)/JOE/CY3 F3: ROX/ TEXAS- RED/TAMRA*(Reserved) F4: CY5/Quasar670 F5: CY5.5 F6: Reserved
Fluorescence Excitation Range	300-800nm		
Fluorescence Detection Range	500-800nm		
Data Export Formats	TXT, PDF, WORD, EXCEL		
<b>Other Features</b>			
AC Power Supply	100 ~ 240V, 50 ~ 60Hz		
Consumption	600 W		
Net Weight	13 KG		
Dimension (LxWxH)	334X280X365mm		
Computer Operating Systems	Windows10, Windows7, Windows XP		
Language	English		