

abCyclerQ

Real-time PCR System

Your
preferred
choice for
qPCR



Easy-to-use
software

10 inch
touch screen
monitor

LED excitation
source and
PD detection

abCyclerQ

Outstanding
& powerful
data analysis
function

Special
Temperature
Protocol
Advantage

7 seconds
top optical
scanning

Technical Specifications

Model	abCyclerQ
Catalogue No.	800700
Thermal Block	
Sample Capacity (wells)	96
Reaction Volume	0- 100 µL
Consumables	0.2 mL 96-well qPCR plates (no skirt, clear/ white); 0.2 mL 8-tube [^] qPCR strips, 0.2 mL qPCR tube [^] (*Clear/ frosted/ white tube with optical flat cap)
Temperature Range	0°C- 100°C
Heating/Cooling Method	Peltier
Max Heating Rate	6.1°C/ sec
Average Heating Rate	4.5°C/ sec
Max Cooling Rate	5.0°C/ sec
Average Cooling Rate	2.8°C/ sec
Temperature Accuracy	± 0.1°C
Temperature Uniformity	± 0.1°C
Gradient Range	1°C- 40°C
Gradient Block	12 rows
Special Temperature Protocol	Gradient PCR, Long PCR, Touch Down PCR
Heating Lid	
Temperature Range	Room temperature to 110°C
Optical System	
Excitation Source	6 LEDS
Detector	Photodiode
Detection Position	Excitation and scan at top
Detection Method	6 channels scanning at the same time, no edge effect
Detection Time	7 seconds for 96 wells for all channels
Range of Excitation/ Emission Wavelengths (nm)	<ul style="list-style-type: none"> • 465/ 510 (FAM, SYBR Green I, SYTO9, EvaGreen, LCGreen) • 527/ 563 (HEX, VIC, TET, JOE) • 580/ 616 (ROX, Texas Red) • 632/ 664 (Cy5) • 680/ 730 (Alexa Fluor680) • 465/ 616 (FRET)
Probe	TaqMan probe, Molecular beacons probe, Scorpion probe, FRET
Multiplexing	Up to 6 targets
Fluorescence Linearity	r ≥ 0.990
Fluorescence Dynamic Range	Adjustable
Performance	
Sample Linearity	/r/ ≥ 0.999
Sample Repeatability	Ct value, CV ≤ 0.5%
Sample Dynamic Range	1- 10 ¹⁰ copies
Software Functions	
Data Analysis Modes	Qualitative analysis, Absolute quantification, Relative quantification, Genotyping analysis, Endpoint analysis, Melt Curve analysis, High Resolution Melt analysis
Control Modes	<ol style="list-style-type: none"> 1. 10.4" touch screen 2. Direct PC control 3. WLAN control (One PC can control a maximum of 10 units and device can be controlled by any PC in the WLAN)
Sample Drawer	Touch screen command
Data Storage	Upload & download via USB; save up to 1000 results in machine memory storage
Power Failure Protection	Continue with experiments after power supply resumes
Customize Report	Default templates with customizable reports
Administration Management	Administrator can set function limit for users
Shipping Lock	Automatically detect shipping lock upon start up
Troubleshooting	Troubleshooting and analysis; instructions for solution
LIS Connection	CSV, Excel, TXT format data output, open port for LIS connection
Others	
PC Operating System	Win 7, Win 10
Communication Port	1 ethernet and 3 USB
Dimension	(W) 355mm x (D) 480mm x (H) 485mm
Weight	30kg
Power Usage	AC 100 to 125V/ 200 to 240V (50/ 60Hz)
Power Consumption	900VA
Working Environment	Temperature: 10°C- 30°C; Humidity: 20%- 85%