Real-time PCR System ALTA RT 48

Your ideal choice for qPCR

CE

IVD

- 7 Inch touch screen, Easy-to-use Software
- Ultra-UniF thermal platform
- 2 seconds lateral optical scanning
- Non-Maintenance optical system
- Outstanding and powerful data analysis functions

ATHENESE-Dx
Early diagnosis for better life

ALTA ®

	ALTA RT 48E	ALTA RT 48S	ALTA RT 48R
Thermal Block			
Sample capacity(wells)	48		
Reaction volume	5-100 μL		
Consumables	0.2ml 8-strip tubes, 0.2ml PCR single tube (Optical flat cap,clear tube)		
Temperature range	0°C-100°C		
Heating / Cooling method	Peltier		
Max heating rate	8.0°C/sec		
Average heating rate	6.0°C/sec		
Max cooling rate	5.5°C/sec		
Average cooling rate	4.0°C/sec		
Temperature Accuracy	±0.1°C		
Temperature uniformity	±0.1°C		
Gradient range	1°C - 40°C	N/A	1°C - 40°C
Gradient block	8 row		8 row
Special temperature protocol	Gradient PCR, Long PCR, Touch Down PCR	Long PCR, Touch Down PCR	Gradient PCR, Long PCR, Touch Down PCR
Heat Lid			
Temperature range	Room Temperature-110°C		
Optical System			
Excitation source	4 LEDs		2 LEDs
Detector	Photodiode		
Detection position	Excitation and scan from lateral		
Detection method	4 Channels scanning at the same time, No edge effect.		
Detection time	2 Seconds for 48 wells for all channels		
Range of excitation/ Emission wavelengths(nm)	1. 465 /510 (FAM, SYBR Green I, SYTO9, EvaGreen, LC Green) 2. 527/ 563 (HEX,VIC,TET,JOE) 3. 580 /616 (ROX,Texas Red) 4. 632/ 664 (Cy5)		1. 465 /510 (FAM, SYBR Green I, SYTO9, EvaGreen, LC Green) 2. 527/ 563 (HEX,VIC, TET, JOE)
Probe	Taqman Probe, Molecular beacons probe, Scorpion probe		
Multiplexing	Up to 4 targets		Up to 2 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	10^1 to 10^{10} copies		
Software Functions			
Data analysis modes	Qualitative analysis, Absolute quantification, Relative quantification,Genotyping analysis, Endpoint analysis, Melt curve analysis, High resolution & Melting		
Control modes	1.7 Touch screen 2.PC direct control 3.WLAN control (One PC can control max 10 units and device can be controled by any PC in the WLAN)		
Data storage	Upload and download through USB disk,1000 results can be stored in machine		
Power failure protection	Automaticly start running experiments after power supply, no need wait PC software		
Customize report	Templetes reserved, report can customized		
Administration management	Administrator can set functions limits for users		
Fault management	Fault report and analysis, solution instruction		
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 2 USB		
Footprint(WxDxH)	260mm X 400mm X 260mm		
Weight	11 kg		
Power usage	AC 100 to 125 V / 200 to 240 V (50/60 Hz).		
Power consumption	600VA		
Work environment	Temperature:10°C-30°C Humidity: 20%-85%		