

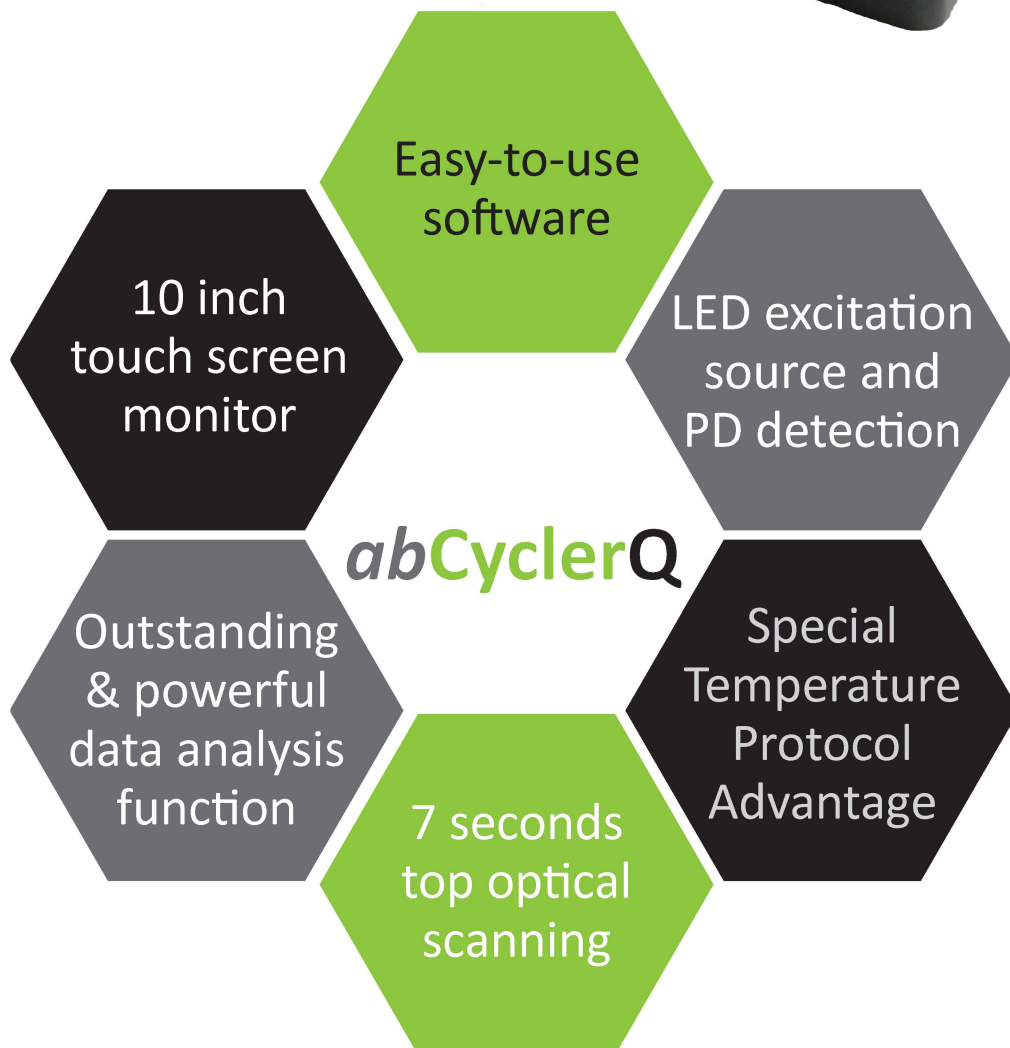
# abCyclerQ **CE IVD**

## Real-time PCR System

The **abCyclerQ** is a powerful tool used to perform rapid and precise real-time polymerase chain reaction (RT-PCR). This six-channel real-time PCR instrument combines advanced optical technology with precise temperature control to deliver reliable detection for both single and multiplex real-time PCR assays.



Your *preferred*  
choice for qPCR



## TECHNICAL SPECIFICATION

<b>Model</b>	abCyclerQ
<b>Catalogue no.</b>	800700
<b>Sample capacity</b>	12 x 0.2ml 8-tube qPCR strips/ 96 x 0.2ml qPCR tubes/ 1 qPCR plate 8x12 (No Skirt)
<b>Tube type</b>	Clear, White, Frosted
<b>Thermoblock</b>	Aluminium
<b>Reaction volume</b>	Up to 100µl
<b>Temperature range</b>	0– 100°C
<b>Heating technology of the block</b>	Peltier element
<b>Max. heating rate</b>	6.1°C/sec
<b>Average heating rate</b>	4.5°C/sec
<b>Max. cooling rate</b>	5.0°C/sec
<b>Average cooling rate</b>	2.8°C/sec
<b>Temperature accuracy</b>	± 0.2°C
<b>Block uniformity</b>	
<b>20– 72°C</b>	± 0.2°C
<b>95°C</b>	± 0.3°C
<b>Gradient range</b>	1– 40°C
<b>Gradient block</b>	12 columns
<b>Gradient temperature range Lid temp. range (Heated Lid)</b>	35– 100°C
<b>Special temperature protocol</b>	Enabled: 40– 110°C; Disabled: Room temperature to 110°C
<b>Sample linearity</b>	Standard mode, Gradient PCR mode, Long PCR mode, Touchdown PCR mode
<b>Sample repeatability</b>	$R^2 \geq 0.998$ or $r \geq  0.999 $
<b>Sample dynamic range</b>	Ct value, CV ≤ 0.5%
<b>Excitation source</b>	1– 10 <sup>10</sup> copies
<b>Detection</b>	6 filtered LED
<b>Detection position</b>	Photodiodes
<b>Detection method</b>	Excitation and detection from the top
<b>Scan time</b>	6 channels scanning at the same time, no edge effect
<b>Channels &amp; wavelength</b>	7 seconds for 96 wells for all channels <ul style="list-style-type: none"> <li>• 465/ 510 (FAM, SYBR Green I, SYTO9, EvaGreen, LCGreen)</li> <li>• 527/ 563 (HEX, VIC, TET, JOE)</li> <li>• 580/ 616 (ROX, Texas Red)</li> <li>• 632/ 664 (Cy5)</li> <li>• 680/ 730 (Alexa Fluor680)</li> <li>• 527/ 616 (Tamra, Cy3, NED)</li> </ul>
<b>Passive Reference Dye</b>	ROX or any calibrated dyes (Use of a passive reference dye is optional)
<b>Probe</b>	TaqMan probe, Molecular beacon probe, Scorpion probe
<b>Multiplexing</b>	Up to 5 targets per well
<b>Fluorescence linearity</b>	$R^2 > 0.980$ or $r >  0.990 $
<b>Data analysis modes</b>	Qualitative analysis, Absolute quantification, Relative quantification, Genotyping, Endpoint analysis, High resolution melt analysis, Melt curve analysis
<b>Control modes</b>	<ul style="list-style-type: none"> <li>• 10.4" touch screen</li> <li>• Direct PC control/ Standalone system</li> <li>• LAN control (One PC can connect up to 10 units)</li> </ul>
<b>Sample loading</b>	Touch screen command on loading platform
<b>Data storage</b>	Upload & download via USB; save up to 1000 run files in internal memory storage
<b>Power failure protection</b>	Continue with experiments after power supply resumes
<b>Customize report</b>	Default template available with customizable options
<b>Shipping lock</b>	Automatically detect shipping lock upon start up
<b>LIS connection</b>	CSV, Excel, TXT format data output, open port for LIS connection
<b>PC operating system</b>	Win 7, Win 10
<b>Communication port Dimension (W x D x H)</b>	1 ethernet and 3 USB
<b>Net weight</b>	355mm x 480mm x 485mm
<b>Power usage</b>	30kg
<b>Power consumption</b>	AC 100– 240V, 50/ 60Hz
<b>Working environment</b>	900VA
	Temperature: 10– 30°C; Humidity: 20– 85%

For more information,  
please call **(65) 6778 6822** or email **sales@aitbiotech.com**