

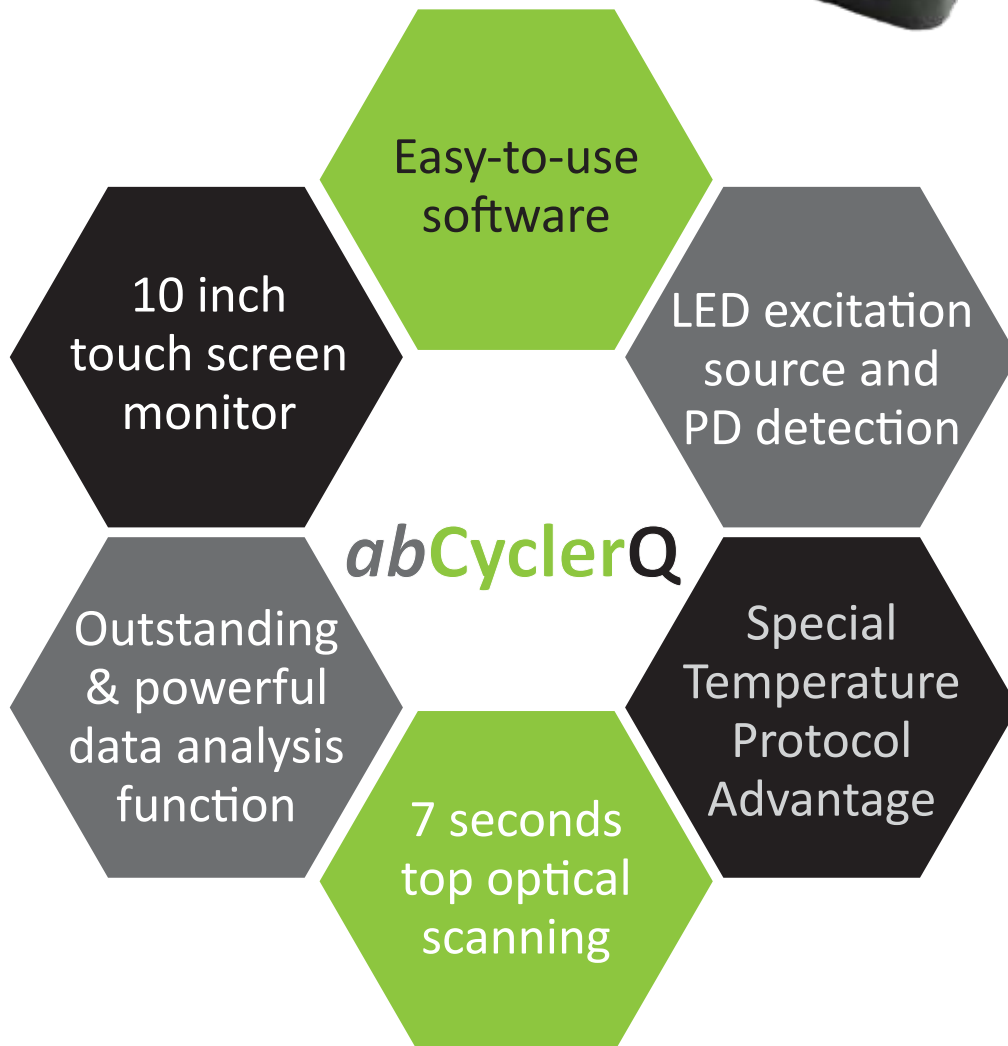
abCyclerQ

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 (5 fluorescence colours and 1 FRET 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

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

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