

# Fast-16™ PCR Instrument

## Mini & Portable

Fast-16™ is a compact, yet high performance real time quantitative PCR system with the throughput of 1-16 samples per run.

Fast-16™ is equipped with a multi-channel fluorescence optical system. It's optimally suited for applications where portability, minimal space, fast time-to-result is required.

Fast-16™ portable mini PCR machine is fit for applications such as point-of-care molecular diagnostics test (POCT), food safety and environment testing, agriculture, or research lab use where bench space is limited.



### System Benefits



- Portable, Light weight
- Run PCR tests anywhere
- No calibration required



- High sensitivity
- Multiple fluorescent channels
- Walk away automation



- Affordable configuration
- Low cost solutions
- Integrated software (No PC required)



- Research collaboration
- Custom design
- OEM & contract manufacturing

# System Specifications



	Fast-16-6	Fast-16-3
<b>PCR</b>		
Sample capacity	16 samples	16 samples
PCR tube	200 uL tubes	200 uL tubes
Sample volume	20 - 100ul	20 - 100ul
Dynamic range	10 orders	10 orders
Sensitivity	1 copy	1 copy
Supported Dyes	FAM, HEX/VIC, ROX, CY5, Cy5.5, Ato425	FAM, HEX/VIC, ROX
Multiplexing	6 targets	3 targets
<b>Optic</b>		
Excitation	430nm, 470nm, 535nm, 575nm, 628nm, 682nm	470nm, 525nm, 570nm
Detection	480nm, 515nm, 565nm, 610nm, 670nm, 725nm	515nm, 565nm, 610nm
Light & detector	LED & Photodiode	LED & Photodiode
<b>Thermal</b>		
Temperature range	4 – 100 °C	4 – 100 °C
Temperature uniformity	≤ ±0.15 °C @ 65°C	≤ ±0.15 °C @ 65°C
Maximum heating rate	≥ 3.5 °C/S	≥ 3.5 °C/S
Average heating rate	≥ 2.5 °C/S	≥ 2.5 °C/S
Maximum cooling rate	≥ 3.5 °C/S	≥ 3.5 °C/S
Average cooling rate	≥ 2.5 °C/S	≥ 2.5 °C/S
Temperature duration accuracy	≤ ±0.1 °C @ 65°C	≤ ±0.1 °C @ 65°C
Hot lid temperature	Ambient - 110°C	Ambient - 110°C
<b>System</b>		
Dimension	360 x 280 x 160mm	360 x 280 x 160mm
Weight	<6.0Kg	<6.0Kg
Power supply	110V - 220V AC, 50-60Hz	110V - 220V AC, 50-60Hz
Noise level	45dB	45dB
Port	USB	USB
Operation Temperature	15 - 30 °C	15 - 30 °C
Operating Humidity	≤ 85%, non-condensing	≤ 85%, non-condensing