

# Fast-16 PCR Instrument

## *Mini & Portable*



Fast-16™ MA-1600 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.

### Portable & Compact



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

### High Performance



- High sensitivity
- Multiple fluorescent channels
- Walk-away automation

### Cost Effective



- Affordable configurations
- Low cost solutions
- Integrated Software (No PC required)

### Custom Design & OEM



- Research collaboration
- Custom design
- OEM & Contract manufacturing

## System Specifications



	Fast-16-2	Fast-16-3
<b>PCR</b>		
Sample capacity	16 samples	16 samples
PCR tube	200 uL tubes	200 uL tubes
Sample volume	20 - 120ul	20 - 120ul
Dynamic range	10 orders	10 orders
Sensitivity	1 copy	1 copy
Supported Dyes	FAM, VIC/HEX	FAM, VIC/HEX, ROX
Multiplexing	2 targets	3 targets
<b>Optic</b>		
Excitation	470nm, 525nm	470nm, 525nm, 570nm
Detection	520nm, 570nm	520nm, 570nm, 620nm
Light & detector	LEDs & Photodiodes	LEDs & Photodiodes
<b>Thermal</b>		
Temperature range	4 – 99 °C	4 – 99 °C
Temperature uniformity	≤ ±0.15 °C @ 65°C	≤ ±0.15 °C @ 65°C
Maximum heating rate	≥ 3.1 °C/S	≥ 3.1 °C/S
Average heating rate	≥ 1.5 °C/S	≥ 1.5 °C/S
Maximum cooling rate	≥ 2.9 °C/S	≥ 2.9 °C/S
Average cooling rate	≥ 1.5 °C/S	≥ 1.5 °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	320*250*177mm	320*250*177mm
Weight	4.5Kg	4.5Kg
Power supply	110V - 220V AC, 50-60Hz	110V - 220V AC, 50-60Hz
Noise level	45dB	45dB
Communications	USB	USB
Operation Temperature	15 - 30 °C	15 - 30 °C
Operating Humidity	≤ 85%, non-condensing	≤ 85%, non-condensing
Approvals	CE	CE