96-Well Real-Time PCR - qPCR System - 4 or 6 Channels - No ROX Correction - 6 °C/s

Model **MSPCR-Q96-5SWISS, MSPCR-Q96-6SWISS** | Brand **Master Science**





The Master Science 96-Well Real-Time PCR is a quantitative PCR system for research, clinical testing, quality and safety analysis and forensic work. It is offered with 4 or 6 fluorescence channels for multiplex assays.

KEY HIGHLIGHTS

- No ROX needed
- Multiplex ready
- Even wells
- Fine discrimination
- Assay optimisation

AT A GLANCE

4 to 100 °C TEMPERATURE RANGE	**10 orders of magnitude** DYNAMIC RANGE
±0.2 °C TEMPERATURE ACCURACY	**96 × 0.1 mL tubes, 8 × 12 strips or one 96-well plate** SAMPLE CAPACITY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
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Overview

A scanning optical system with time-resolved signal separation and an MPPC detector reduces colour crosstalk and edge effects, so no ROX passive reference correction is needed. Edge temperature compensation helps keep all 96 wells at the same temperature.

Key Benefits

No ROX needed
the Master Science 96-Well Real-Time PCR separates signals by time-resolved detection.

Multiplex ready
up to 6 channels.

Even wells
edge temperature compensation.

Fine discrimination
detects 1.33-fold copy differences.

Assay optimisation
1 to 36 °C gradient.

For a compact 32-well unit, see the Master Science portable real-time PCR.

Technical Specifications

GENERAL	
General	Specifications of the Master Science 96-Well Real-Time PCR (Q96-5 / Q96-6):
Brand	Master Science
Model Number	MSPCR-Q96-5SWISS, MSPCR-Q96-6SWISS
SKU	MSPCR-Q96-5SWISS, MSPCR-Q96-6SWISS
Brand	Master Science
Model Numbers	MSPCR-Q96-5SWISS, MSPCR-Q96-6SWISS
SKU	MSPCR-Q96-5SWISS, MSPCR-Q96-6SWISS
Sample Capacity	**96 × 0.1 mL tubes, 8 × 12 strips or one 96-well plate**
Reaction Volume	10 to 50 µL
Thermal System	Peltier with edge temperature compensation
Maximum Ramp Rate	6.0 °C/s
Temperature Range	**4 to 100 °C**
Temperature Accuracy	**±0.2 °C**
Uniformity	±0.2 °C at 60 °C and 95 °C
Gradient	30 to 100 °C, span 1 to 36 °C
Excitation	5 or 6 high-efficiency single-colour LEDs
Excitation / Detection	455 to 650 nm / 510 to 715 nm
Fluorescence Channels	4 (Q96-5) or 6 (Q96-6)
Supported Dyes	FAM/SYBR Green, VIC/JOE/HEX/TET, TAMRA/Cy3, ROX/Texas Red, Cy5 and others
Sensitivity	Single-copy gene
Resolution	1.33-fold copy number difference (single-plex)
Dynamic Range	**10 orders of magnitude**
Package (Q96-5)	960 × 660 × 750 mm, 47 kg gross
Detector	MPPC, time-resolved signal separation

HOW THE MASTER SCIENCE 96-WELL REAL-TIME PCR IMPROVES QPCR DATA	
Crosstalk between dyes	time-resolved separation.
Edge wells reading differently	edge temperature compensation.
Extra cost of ROX reference dye	no ROX correction required.
Limited multiplexing	up to 6 channels.

The Master Science 96-Well Real-Time PCR is used in

- **Scientific research**
- **Clinical detection and diagnosis**
- **Food quality and safety testing**
- **Forensic analysis**
- **Multiplex PCR assays**

Optics

- Scanning optical system
- Time-resolved signal separation
- MPPC detector

Thermal

- Peltier, 6 °C/s
- Edge temperature compensation
- Gradient 1 to 36 °C span

Assays

- 4 or 6 channels
- Single-copy sensitivity
- 10-log dynamic range