

QuantStudio Absolute Q Digital PCR System

The Applied Biosystems™ QuantStudio™ Absolute Q™ Digital PCR System combines the power of absolute quantification via digital PCR with the simplicity of a qPCR workflow. With a single hands-on step that takes 5 minutes to complete, digital PCR is now easier than ever. The QuantStudio Absolute Q system provides a high-quality, consistent, and easy-to-use solution for researchers who want to join the quantification revolution.

Features of the QuantStudio Absolute Q system:

- Easy and convenient qPCR-like workflow with only 5 minutes of hands-on time
- Helps reduce errors and manual inputs with all functions integrated into a single instrument
- Increases productivity, with results in as little as 90 minutes
- Helps minimize downtime with Smart Remote Support; troubleshooting by technical support for speedy resolution
- Applied Biosystems™ QuantStudio™ Absolute Q™ Digital PCR Software enables intuitive setup, monitoring, and analysis
- Security, auditing, and e-signature features to support 21 CFR Part 11 compliance



Performance specifications

Compatible dyes	Applied Biosystems™ FAM™, HEX™, VIC™, ABY™, ROX™, JUN™ dyes; Cy®5 dye See optical configuration for additional details.
Multiplexing	4 targets (5 optical channels, ROX dye used for reference)
Dynamic range	5 orders of magnitude
Sensitivity	1–100,000 copies
Precision	±10%
Sample throughput	Up to 16 samples per run Arrays can be run in multiples of 4 (4, 8, 12, or 16) on a single Applied Biosystems™ QuantStudio™ MAP16 plate
Microchambers per reaction	20,480
Percentage of sample analyzed	95%

System specifications

Dimensions, unpacked (L x W x H)	62 x 60 x 54 cm 24.5 x 23.5 x 21.2 in.
Dimensions, packaged (L x W x H)	82.6 x 94 x 89.9 cm 32.5 x 37 x 35 in.
Weight	Approx. 60 kg (132 lb)
Connections	Power, USB 3.0 (to dedicated PC)
Cooling mode	Forced convection
Illumination	Red, blue, green, high-powered LED
Optical channels	5 (fixed configuration)
Power input	100–240 VAC, 50–60 Hz
Power rating	1,200–1,600 W
Rated current	12 A (110 V), 8.5 A (230 V)
Maximum noise level	70 dB

Dedicated computer requirements

Operating system	Microsoft™ Windows™ 10 (64-bit) or later
Computer	Dell™ OptiPlex™ XE3 tower

Optical configuration

	Color	Excitation filter peak λ (nm)	Emission filter peak λ (nm)	Examples of compatible dyes
1	Blue	466	520	FAM
2	Green	514	560	HEX, VIC
3	Yellow	549	589	ABY
4	Red	589	625	ROX
5	Deep red	630	684	JUN, Cy5

Find out more at thermofisher.com/absoluteq