CFX96 Dx System

The CFX96 Dx System for in vitro diagnostic use is designed with reliability and performance in mind. With five-target detection, unsurpassed thermal cycler performance, and easy-to-use software, the CFX96 Dx is an open system offering the ultimate flexibility in commercial assay selection or rapid assay development.

The CFX96 Dx System makes it easy for you to:

- Generate robust results right away with factory-calibrated optics and fast system setup
- Conserve samples and reduce reagent cost using up to 5-target multiplexing with reaction volumes as low as 10 µl
- Streamline data analysis with built-in analysis modules and sophisticated quality control (QC) tools
- Create a personalized system setup with user-specific system access settings and flexible instrument configurations

Specifications

C1000 Dx Thermal Cycler with CFX96 Dx ORM*			
Maximum ramp rate	5°C/sec	Gradient	
Average ramp rate	3.3°C/sec	Operational range	30–100°C
Heating and cooling method	Peltier	Programmable span	1–24°C
Lid	Heats up to 105°C	Temperature range	0–100°C
		Temperature accuracy	±0.2°C of programmed target at 90°C
		Temperature uniformity	±0.4°C well-to-well within 10 sec of arrival at 90°C

Optical Detection			
Excitation	6 filtered LEDs	Dynamic range	10 orders of magnitude
Detection	6 filtered photodiodes	Scan time	
Range of excitation/ emission wavelengths	450–730 nm	All channels	12 sec
		Single-channel fast scan	3 sec
Sensitivity	Detects 1 copy of target sequence in human genomic DNA		

Software			
Operating systems	Windows 7 (32-bit, 64-bit), Windows 10 (64-bit)		Allelic discrimination
Memory	Minimum of 1 GB		End-point analysis
Multiplex analysis	Up to 5 targets per well	Data export	Save, copy, and print all graphs and spreadsheets from right-click menu
Data analysis modes	PCR quantification with standard curve		Export specified data in multiple formats
	Melt curve analysis		Copy and paste into Microsoft Excel, Word, or PowerPoint file
	Gene expression analysis by relative quantity (ΔCq) or normalized expression (ΔΔCq) with multiple reference genes and individual reaction efficiencies		Customizable reports containing run settings, data graphs, and spreadsheets can be directly printed or saved as PDFs
	Data analysis options include bar chart, clustergram, scatter plot, volcano plot, and heat map		
	Multiple file gene expression analysis for comparison of an unlimited number of quantification cycle (Cq) values		

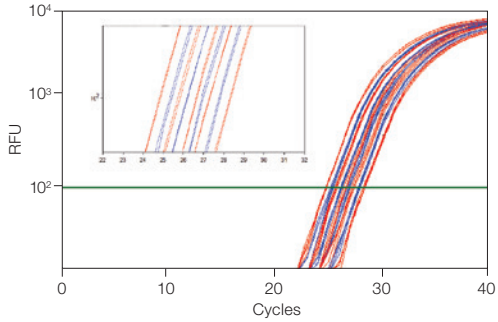
System			
Sample capacity	96 wells	Dimensions (W x D x H)	33 x 46 x 36 cm (13 x 18 x 14 in.)
Sample size	1–50 µl (10–25 µl recommended)	Weight	21 kg (47 lb)
Communication	USB 2.0	Real-time PCR license	Yes
Electrical approvals	IEC, CE	In vitro diagnostic license	Yes
		CE-IVD mark	Yes

BIO-RAD

Simplicity Through Innovation

The CFX96 Dx System is built on the proven 1000-series thermal cycling platform. The system incorporates innovative optical technologies with long-lasting LEDs and solid-state components to provide maximum reliability and flexibility.

- Scanning optics read each well individually with high sensitivity and no cross talk to deliver optimal quantitative results
- Multiple data acquisition modes, including a fast scan option for EvaGreen® or SYBR® Green I users and an all channels mode to detect up to 5 targets in a single well, let a run be tailored to suit the application
- Several control configurations are available — run a stand-alone system or independently run up to 4 instruments from 1 computer
- A startup wizard, intuitive experiment setup, and streamlined data analysis enable fast result turnaround



Exceptional reproducibility can be achieved with SsoFast EvaGreen® Supermix. Efficient discrimination and reliable quantification can be obtained from 1.33-fold serial dilutions of input template. The *CBP* gene was amplified from varying amounts of human genomic DNA. From left to right: (■), 5 ng, 2.83 ng, 1.60 ng, 903 pg, and 511 pg; (■), 3.76 ng, 2.13 ng, 1.20 ng, and 679 pg. *CBP* efficiency = 96.5%, R^2 = 0.996. Inset is a magnified view showing robust discrimination and reproducible amplification. RFU, relative fluorescence units.

Software Solutions for Accurate Results

CFX Manager Dx Software offers tools to simplify real-time PCR for every laboratory. Immediately generate results using the Startup Wizard and intuitive experiment setup. Enter or edit well information before, during, or after a run.

Analyze data when and where you want by receiving an email with an attached data file when a run is completed. When data are in hand, use the comprehensive data analysis, QC, and report tools to take the guesswork out of analyzing and reporting results for any real-time PCR application.

Ordering Information

To order the CFX96 Dx System, you must include both catalog numbers.

Catalog #	Description
1845097-IVD	**CFX96 Dx ORM**, includes CFX Manager Dx Software, version 3.1 (catalog number 12007917)
1841000-IVD	**C1000 Dx Thermal Cycler**

USA: For in vitro diagnostic (IVD) use. The CFX96 Dx System and CFX96 Deep Well Dx System are registered with the U.S. FDA as Class II 510(k) exempt devices.

Canada: The CFX96 Dx System and CFX96 Deep Well Dx System are registered as Class I devices.

China: The CFX96 Deep Well Dx System has been certified as a Class III medical device by China's National Medical Products Administration (NMPA).

EU: For in vitro diagnostic use. The CFX96 Dx and CFX96 Deep Well Dx Systems meet the requirement of the European In Vitro Diagnostic Regulation (2017/746).

BIO-RAD

Bio-Rad Laboratories, Inc.

Life Science Group

Website *bio-rad.com* ***USA*** *1 800 424 6723* ***Australia*** *61 2 9914 2800* ***Austria*** *00 800 00 24 67 23* ***Belgium*** *00 800 00 24 67 23* ***Brazil*** *4003 0399*
Canada *1 905 364 3435* ***China*** *86 21 6169 8500* ***Czech Republic*** *00 800 00 24 67 23* ***Denmark*** *00 800 00 24 67 23* ***Finland*** *00 800 00 24 67 23*
France *00 800 00 24 67 23* ***Germany*** *00 800 00 24 67 23* ***Hong Kong*** *852 2789 3300* ***Hungary*** *00 800 00 24 67 23* ***India*** *91 124 4029300* ***Israel*** *0 3 9636050*
Italy *00 800 00 24 67 23* ***Japan*** *81 3 6361 7000* ***Korea*** *82 2 3473 4460* ***Luxembourg*** *00 800 00 24 67 23* ***Mexico*** *52 555 488 7670*
The Netherlands *00 800 00 24 67 23* ***New Zealand*** *64 9 415 2280* ***Norway*** *00 800 00 24 67 23* ***Poland*** *00 800 00 24 67 23* ***Portugal*** *00 800 00 24 67 23*
Russian Federation *00 800 00 24 67 23* ***Singapore*** *65 6415 3188* ***South Africa*** *00 800 00 24 67 23* ***Spain*** *00 800 00 24 67 23* ***Sweden*** *00 800 00 24 67 23*
Switzerland *00 800 00 24 67 23* ***Taiwan*** *886 2 2578 7189* ***Thailand*** *66 2 651 8311* ***United Arab Emirates*** *36 1 459 6150* ***United Kingdom*** *00 800 00 24 67 23*

Bulletin 7053 Ver D US/EG *22-0382 0522 Sig 0122*