The CFX Opus Deepwell Real-Time PCR System brings modern quantitative PCR (qPCR) to your nucleic acid detection lab. Whether you are pooling samples, running nonprecious matrices, or requiring large volumes for other reasons, the CFX Opus Deepwell System brings your workflow all the features and connectivity you need.

As with our other CFX Opus Systems, you can use CFX Maestro Software (for PC) locally or use your BR.io account to set up a run and access your results anytime and anywhere you have internet access.

**Benefits**

- One of the industry’s largest qPCR reaction volumes, up to 125 µl
- Reaction volumes ≤10 µl depending on the application
- Flexible connectivity and data management options for access and transfer of runs and experiment protocols
  - Operate in stand-alone mode through flexible connectivity options of wireless network (WiFi), Ethernet, and USB
  - Access the BR.io cloud platform for experimental setup and data management at any convenient location with internet access
  - Enjoy continued support for and control of up to 4 CFX instruments with CFX Maestro Software for Windows 7 (64-bit), Windows 10 (64-bit), and Security Edition
  - Email your completed run
  - Save protocols and completed runs in a network folder
  - Set up unique user names, with optional passwords, to easily organize and find your protocols and experiments

**Specifications**

<table>
<thead>
<tr>
<th>System</th>
<th>Licensed for real-time PCR</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample capacity</td>
<td>96 wells</td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>1–125 µl (10–125 µl recommended)</td>
<td></td>
</tr>
<tr>
<td>Dimensions (W x D x H)</td>
<td>33 x 56 x 36 cm (13 x 22 x 14 in.)</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>22 kg (48 lb)</td>
<td></td>
</tr>
<tr>
<td>Touch-screen user interface</td>
<td>Adjustable, with angle of rotation 12–55º</td>
<td></td>
</tr>
<tr>
<td>Communications</td>
<td>USB 2.0 or above, Ethernet, WiFi</td>
<td></td>
</tr>
<tr>
<td>Electrical approvals</td>
<td>IEC, CE</td>
<td></td>
</tr>
<tr>
<td>Operating system</td>
<td>Windows 10 IoT</td>
<td></td>
</tr>
<tr>
<td>Optical Detection System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excitation</td>
<td>6 filtered LEDs</td>
<td></td>
</tr>
<tr>
<td>Detection</td>
<td>6 filtered photodiodes</td>
<td></td>
</tr>
<tr>
<td>Range of excitation/ emission wavelengths</td>
<td>450–730 nm</td>
<td></td>
</tr>
<tr>
<td>Scan time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All channels</td>
<td>12 sec</td>
<td></td>
</tr>
<tr>
<td>Single channel</td>
<td>3 sec</td>
<td></td>
</tr>
<tr>
<td>Dynamic range</td>
<td>10 orders of magnitude</td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Detects 1 copy of target sequence in human genomic DNA</td>
<td></td>
</tr>
<tr>
<td>Multiplex analysis</td>
<td>Up to 5 targets per well</td>
<td></td>
</tr>
</tbody>
</table>

Large Volumes for the Modern Detection Laboratory

Visit bio-rad.com/CFXOpus for more information.
Specifications

96-Well Reaction Block
- Sample block type: Fixed 96-well sample block
- Heating and cooling method: Peltier
- Lid heating: 30–110°C
- Temperature range: 4–100°C
- Maximum ramp rate: 2.5°C/sec
- Average ramp rate: 2°C/sec
- Thermal accuracy: ±0.2°C
- Thermal uniformity: 0.8 ± 0.4°C, measured 10 sec after the target temperature

Gradient
- Operational range: 30–100°C
- Programmable span: 1–24°C

CFX Maestro Data Management and Analysis Software
- Operating system: Windows 7 (64-bit), Windows 10 (64-bit)
- Memory: Minimum of 1 GB
- Data analysis modes: PCR quantification with standard curve
  - Melt curve analysis
  - Gene expression analysis by relative quantity (ΔCq) or normalized expression (ΔΔCq)
  - Multiple-file gene expression analysis for comparison of an unlimited number of quantification cycle (Cq) values
  - Allelic discrimination
- Endpoint analysis
- Statistics include t-test and analysis of variance (ANOVA)
- Data export: Save, copy, and print all graphs and spreadsheets from right-click menu
- Export specified data in multiple formats
- Copy and paste into a Microsoft Excel, Word, or PowerPoint file
- Print directly or save as PDFs customizable reports
- Export run settings, data graphs, and spreadsheets containing run settings, data graphs, and spreadsheets
- Export to RDML
- Image export: Export images at any pixel size and at a resolution up to 600 dpi
- Save images as .bmp, .jpg, or .png files

Catalog # | Description
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12018658 | CFX Opus Deepwell Real-Time PCR System, includes power cord, USB cable, and Ethernet cable; does not include CFX Maestro Software 2 or WiFi adaptor
17008093 | CFX Opus Deepwell Real-Time PCR System with Starter Pack, includes CFX Opus Deepwell System, CFX Maestro Software 2, license for qbase+ Software, power cable, USB cable, Ethernet cable, reagents, consumables
12013758 | CFX Maestro Software 2
12004128 | CFX Maestro Software for Mac
12012832 | CFX Maestro Software 2, Security Edition, 1 license
12013028 | CFX Maestro Software 2, Security Edition, 5 licenses
12012833 | CFX Maestro Software 2, Russian Edition
12012834 | CFX Maestro Software 2, Chinese Edition
1845025 | Precision Melt Analysis Software, includes 2 user licenses, installation CD, 2 HASP HL keys, melt calibration kit
1845098 | CFX Qualification Plate, 96-well
1814000 | PX1 PCR Plate Sealer, includes heat sealing instrument
1814030 | PCR Plate Heat Seal, pkg of 100, optically clear seals for use with the PX1 PCR Plate Sealer
1708840 | iScript Reverse Transcription Supermix for RT-qPCR, 25 µl reactions
1725037 | iScript Advanced cDNA Synthesis Kit for RT-qPCR, 25 µl reactions
1725270 | SsoAdvanced Universal SYBR® Green Supermix, 2 ml (2 x 1 ml), 200 x 20 µl reactions
1725280 | SsoAdvanced Universal Probes Supermix, 2 ml (2 x 1 ml), 200 x 20 µl reactions
1725120 | iTaq Universal SYBR® Green Supermix, 2 ml (2 x 1 ml), 200 x 20 µl reactions
1725130 | iTaq Universal Probes Supermix, 2 ml (2 x 1 ml), 200 x 20 µl reactions
1725200 | SsoFast EvaGreen® Supermix, 2 ml (2 x 1 ml), 200 x 20 µl reactions
1725210 | SsoFast EvaGreen® Supermix with Low ROX, 2 ml (2 x 1 ml), 200 x 20 µl reactions
12010176 | Reliance One-Step Multiplex RT-qPCR Supermix, 1 ml (1 x 1 ml), 200 x 20 µl reactions
1725150 | iTaq Universal SYBR® Green One-Step Kit, 100 x 20 µl reactions
1725140 | iTaq Universal Probes One-Step Kit, 100 x 20 µl reactions
1725848 | qM Multiplex Powermix, 50 x 50 µl reactions
1725995 | SingleShot SYBR® Green One-Step Kit for Cell Lysis and RT-qPCR, 100 x 50 µl reactions
1725160 | SsoAdvanced PreAmp Supermix, 1.25 ml (1 x 1.25 ml), 50 x 50 µl reactions
17005726 | SEQuoia Complete Stranded RNA Library Prep Kit, 24 reactions
17005710 | SEQuoia Complete Stranded RNA Library Prep Kit, 96 reactions
12019928 | SEQuoia Dual Indexed Primers Set, 12 vials of unique dual indexed primers, 96 reactions
12011930 | SEQuoia Dual Indexed Primers Plate, 96-well plate of unique dual indexed primers, 96 reactions

Ordering Information

All software for Windows unless otherwise noted.

Catalog # | Description
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12016658 | CFX Opus Deepwell Real-Time PCR System, includes power cord, USB cable, and Ethernet cable; does not include CFX Maestro Software 2 or WiFi adaptor
17008093 | CFX Opus Deepwell Real-Time PCR System with Starter Pack, includes CFX Opus Deepwell System, CFX Maestro Software 2, license for qbase+ Software, power cable, USB cable, Ethernet cable, reagents, consumables

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Life Science Group

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France: 00 800 00 24 67 23
Germany: 00 800 00 24 67 23
Hong Kong: 852 2788 3300
Hungary: 00 800 00 24 67 23
India: 91 124 4029300
Israel: 03 9636050
Italy: 00 800 00 24 67 23
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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: 30 1 459 6150
United Kingdom: 00 800 00 24 67 23

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