# BD Accuri™ C6 Flow Cytometer

## Technical Specifications

The BD Accuri™ C6 flow cytometer is easy to use, simple to maintain, and affordable.

Small and easily transportable, the BD Accuri C6 cytometer measures 11 x 14.75 x 16.5 in. (27.9 x 37.5 x 41.9 cm) (H x W x D) and weighs just 30 pounds (13.6 kg). It is small enough to easily fit on a benchtop, and can be placed in a laminar flow hood.

The system is equipped with a blue laser and a red laser, two scatter detectors, and four fluorescence detectors with interference filters optimized for the detection of FITC, PE, PerCP-Cy™5.5, and APC. A compact optical design, fixed alignment, and pre-optimized detector settings make the system easier to use.

A unique low-pressure pumping system drives the fluidics. A sheath-focused core enables event rates of up to 10,000 events per second and a sample concentration over 5 x $10^6$ cells per mL. The optional BD CSampler™ accessory streamlines sample processing with reliable and easy-to-use automation.

BD Accuri™ C6 software has an intuitive user interface designed with the researcher in mind. The tabbed interface provides quick access to the collection, analysis, and statistics functions. Analysis can be performed on the BD Accuri C6 cytometer or can be exported into third-party programs such as FCS Express™.

## Optics

**Laser Excitation**
488 nm (rated at 20,000-h life)

640 nm (rated at 20,000-h life)

**Laser Profile**
10 x 75 µm

**Light Scatter Detection**
Forward (0°, ±13°)

Side (90°, ±13°)

**Emission Detection**
4 colors, user-changeable optical filters

Standard set installed:

- FL1 533/30 nm (eg, FITC/GFP)
- FL2 585/40 nm (eg, PE/PI)
- FL3 > 670 nm (eg, PerCP, PerCP-Cy5.5, PE-Cy™7)
- FL4 675/25 nm (eg, APC)

**Optical Alignment**
Fixed alignment

## Fluidics

**Flow Cell**
200 µm ID quartz capillary

**Minimum Detectable Particle Size**
0.5 µm

**Minimum Sample Volume**
50 µL

**Pre-Set Flow Rates and Core Sizes**
Slow : 14 µL/min, 10-µm core

Medium: 35 µL/min, 16-µm core

Fast: 66 µL/min, 22-µm core

**Custom Sample Flow Rates**
10–100 µL/min

**Custom Core Diameter**
5–40 µm

**Recommended Sheath Fluid**
0.2-µm filtered DI water

**Maximum Events Per Sample**
1 million events per well

## Performance

**Fluorescence Sensitivity, MESF***
FITC < 150; PE < 100

**Scatter Resolution**
Resolves human peripheral blood lymphocytes, monocytes, and granulocytes

**Fluorescence Linearity**
2 ±0.05% for chicken erythrocyte nuclei (CEN)

**Fluorescence Precision**
<3% CV for CEN

**Data Acquisition Rate**
10,000 events/second, maximum

*MESF values determined using Thermo Scientific Cyto-Cal™ Multifluor Plus Violet Beads.

# Data Management

**BD Accuri C6 Software Minimum Requirements**
32-bit Windows® XP or later
(The BD Accuri C6 is not compatible with 64-bit)

Minimum screen resolution 1280x1024

2 GB RAM

5 GB of free hard disk space

**Workstation Minimum Specifications**
Small form chassis

6 USB 2.0 Ports

1 External SATA RMSD Bay

Intel® HD Graphics 2000

180-W Energy Star efficient internal power supply

**Memory and Processor**
4 GB RAM (Non-ECC, 1,333 MHz DDR3 RAM, 2x2 GB)

Core™ i3 2100 3.1-GHz processor

**Hard Drive and Data Storage Options**
250-GB or greater hard drive, 8-MB data burst cache

8x DVD reader

**Monitor**
LCD flat panel 19"

4 USB 2.0 ports (for peripheral devices)

**Peripheral Devices**
USB Entry Keyboard

USB Optical Mouse

**Networking**
Ethernet LAN 10/100/1000

**Operating System**
Windows® 7 Professional
(English, factory installed)

# Installation Requirements

**Power Requirements**
100–240 VAC, 50/60 Hz

**Typical Power Consumption**
154 VA

**Heat Output**
240 BTU/hour maximum output

**Operating Ranges**
15–30°C; <80% relative humidity

**Instrument Size (H x W x D)**
11 x 14.75 x 16.5 in.
(27.9 x 37.5 x 41.9 cm)

**Footprint with Fluid Bottles (H x W x D)**
11 x 21.5 x 16.5 in.
(27.9 x 54.6 x 41.9 cm)

**Weight**
30 lb (13.6 kg)

**Fluid Bottle Capacity**
2 L sheath fluid
2 L waste
250 mL cleaner
250 mL decontamination fluid

**Signal Processing**
24-bit datapath

**Computer Interface**
USB 2.0

**Warranty**
1 year

# Options

## BD CSampler Accessory

**Power Requirements**
No additional power necessary

**Software Requirements**
BD CSampler™ software

**Compatible Plate Types**
Standard 96-well (flat, round, and v-bottom) plates

Deep-well 96-well plates

48-well plates

12 x 75-mm tubes can also be accommodated using the supplied 24-tube rack.

Plates manufactured to the guidelines published by the American National Standards Institute, submitted by the Society for Biomolecular Screening, should be compatible with the BD CSampler.

**Space Requirements**
Minimum bench depth 28 in. (71 cm)

Minimum width (C6 with CSampler) 19.5 in. (49.5 cm)

**Processing Time**
<90 minutes for 96-well plate, utilizing 30-second acquisition time per well

**Weight**
7 lb (3.2 kg)

**Minimum Sample Volume**
50 µL for tubes or plates

**Wash Cycle**
Up to 3 wash cycles per well

**Agitate Cycle**
Up to 3 agitate cycles per well

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Class 1 Laser Product.



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