Technical Data Sheet
Flow Cytometer FC - 3200

1. **Sample Handling & Acquisition**

- Supports 1.5 / 2.0 / 5.0 mL tubes
- Compatible with 96-well microtiter plates (optional plate loader)
- Automatic Micro-Sampling System (AMS) with:
  Low dead volume,
  Low carryover,
  Tube ↔ plate switching in seconds
- Plate throughput: ~35 minutes per 96-well plate
- Sample flow rate: Low: 15 pL/mm, Medium: 30 pL/mm, High: 60 pLI mm
- Fluidic Modes:Long clean, SIT flush, Purge filter, Clean flow cell
- Plate stage temperature: 4-30°C
- CARRYOVER: <0.1%
- DATA ACQUISITION RATE: 35,000 events/s*

2. **Optical System**

- Optical Platform: Fixed optical assembly with spatially separated laser beams
- Laser Configurations:
  1 Laser: 488 nm (50 mW),
  2 Lasers: 488 nm (50 mW), 640 nm (80 mW),
  3 Lasers: 405 nm (100 mW), 488 nm (50 mW), 640 nm (80 mW)
- Beam Geometry: Flat-top laser beam profile (optimized for high sensitivity & small particle detection)

3. **Detectors**

- Fluorescence Detection:High-sensitivity semiconductor detector array (PMT-equivalent performance)
- Forward Scatter (FSC): Semiconductor detector (488 nm)
- Side Scatter (SSC):488 nm SSC, 405 nm Violet SSC (for 3-laser configuration)

4. Fluorescence Channels

- **Violet Module:** 16 channels (420–829 nm)
- **Blue Module:** 14 channels (498–829 nm)
- **Red Module:** 8 channels (652–829 nm)
- **Total Capability:** Up to **24 colors** with 3 lasers
- No optical filter changes required
- Performance FLUORESCENCE SENSITIVITY FITC: ≤35 MEFL, PE:≤1 O MEFL, APC:≤1 O MEFL,
- Pacific Blue:≤2SMEFL
- FLUORESCENCE LINEARITY FITC R2 ≥O.995 I PE R2 ≥O.995

5. Data Acquisition Performance

- **Maximum Event Rate:** 35,000 events/second

6. Absolute Cell Counting

- Volumetric sensor–based absolute counting
- No mandatory requirement of reference beads
- Supports absolute cell count with or without beads
- STANDARD FLUIDIC RESERVOIRS: 4L fluid container set with level-sensing provided. Compatible with 20L sheath and waste cubitainers

7. Threshold & Gating

- Threshold setting available on all parameters
- Multiple thresholds can be applied simultaneously during a single sample run
- Thresholds selectable on: FSC, SSC,
- Any fluorescence parameter
- Combination of parameters

8. Fluorescence Compensation

- Manual compensation supported
- Auto-compensation supported
- Unrestricted compensation range: 0–100%
- Compensation available: During acquisition, Post-acquisition analysis