



The Cytek® Aurora system is a high-end, full spectrum analyzer equipped with up to 5 lasers and up to 64 fluorescent APD detectors, small particle detection capabilities, and the ability to extract autofluorescence in real time. An optimized full spectrum detector configuration means no more filter changes, quick and easy setup for every application.

The Cytek® Aurora system is the only flow cytometer on the market capable of offering the following combination of performance features:

- Full Spectrum Profiling™ (FSP™) to differentiate populations of interest.
- Live unmixing of data during sample acquisition using SpectroFlo™ acquisition software.
- Simultaneous analysis of at least 42 parameters (OMIP-069: Forty-Color Full Spectrum Flow Cytometry Panel for Deep Immunophenotyping of Major Cell Subsets in Human Peripheral Blood (<https://doi.org/10.1002/cyto.a.24213>), in its 5-LASER configuration, making it unique among existing conventional or spectral flow cytometers.
- Flat-Top laser beam profiles with narrow vertical beam heights, providing improved resolution of single cells and small particles at a variety of flow rates.
- Two (2) high-performance semiconductor detectors for SSC detection off the violet and blue lasers. The Violet SSC detector is recommended for improved resolution of small particles.
- Proprietary high sensitivity Coarse Wavelength Division Multiplexing (CWDM) semiconductor array on each laser, enabling more efficient capture across the full spectrum in the 365-829 nm range.
- High quantum-efficiency avalanche photodiode (APD) detector arrays for each laser, with up to 16 detectors unevenly spaced to capture the emitted light.
- Quick proportional adjustment of all detector gains/voltages and pre-optimized detector settings (Cytek Assay Settings), avoiding time-consuming adjustments of individual detectors
- Quick switching between manual tubes and high-throughput plate / tube rack options.
- 22-bit 6.5 log decades data.
- Autofluorescence extraction to use cellular autofluorescence as a unique spectral signature, allowing improved resolution of samples with high autofluorescence.
- Small footprint instrument capable of fitting on a standard lab bench.
- Portability of panels over to the Cytek® Aurora CS, where you can now sort populations from the same panel without making changes to the optics, maintaining consistency for sorting of critical cell populations.