Applications

Nucleic Acids: Determine concentration of dsDNA using the PicoGreen® Assay, Quant-iT™ DNA Assay, or Hoechst 33258 dye and of RNA using RiboGreen® dye.

Proteins: Determine concentration of proteins using Quant iT™ Protein assay kit.

Other: Additional preconfigured applications include FITC (fluorescein), Cy-Alexa Fluor dyes, B-Phycoerythrin, Quinine Sulfate, Sulforhodamine, 4-MU.

Custom: Use the method editor to configure new fluorescent applications.

Novel Technology

A 1-2 ul sample is pipetted directly onto the measurement surface and held in place by surface tension. Excitation occurs from one of 3 LED sources: UV, Blue or White. Emitted light at a 90° angle is measured using a CCD array detector. The uniquely clean optics of the patented retention system, combined with proprietary signal processing for the white LED applications, enables measurements across a wide range of wavelengths without cumbersome and costly filter changes.

Specifications

- Sample Size: 1-2 microliters
- Light Sources: 3 light emitting diodes (LEDs)
  - UV: 365 nm
  - Blue: 470 nm
  - White: 500-650 nm
- Detector Type: 2048-element linear silicon CCD array
- Wavelength Range: 400-750 nm
- Wavelength Accuracy: 1 nm
- Wavelength Resolution: 8 nm (FWHM at Hg 546nm)
- Fluorescence Precision: < 5% CV (10 nM fluorescein)
- Fluorescence Range: > 4 decades fluorescein
- Detection Limit: 1 fmol fluorescein
- Measurement Cycle Time: 10-15 seconds
- Footprint: 14 cm X 20 cm
- Weight: 1.5 kg
- Sample Pedestal Material of Construction:
  - 303 stainless steel and quartz fiber
- Operating Voltage: 5 vdc
  (all power supplied by USB port)
- Operating Power Consumption: 2 W
  Standby Power Consumption: 1 W
- CE and UL/CSA Approval