

Technical Specifications

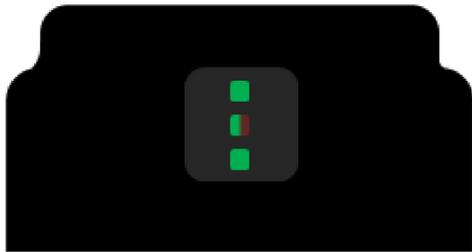
Measurement Principle

Backscattered light intensity [a.u.]
**Backscatter signal can be converted to OD₆₀₀ values if two offline values are provided*

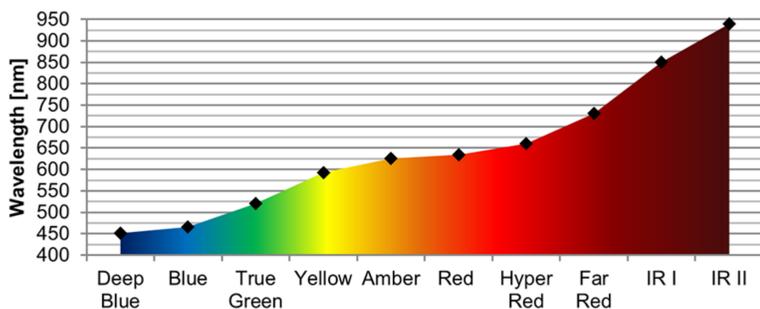
Measurement Range

Standard mode (521 nm): OD₆₀₀ 0.5 - 50
 High cell density mode (940 nm): OD 5 - 200

Wavelength



Standard wavelength of each BioR LED:
 Position 1: 521 nm
 Position 2: 940 nm
 Position 3: 521 nm
**wavelength of each CGQ Sensor is customizable during the ordering process*



Spectrum of all available LED colors for wavelength customization of CGQ Sensors

Measurement Window Dimensions

18.5 x 18.5 mm

Measurement Interval

Recommended: 5 - 30 seconds
 DOTS Software Default: 20 seconds

Measurement Frequency

>500kHz, equaling >500,000 backscatter readings per second

Footprint

Sensor plates: 92 - 177 mm
 CGQ Hub starting from 44 x 105 x 109 mm (L x W x H)

Vessel Compatibility

Single- or double-jacketed bioreactors
 Mini bioreactor systems
 Benchtop bioreactors
 Production scale reactors

Recommended Operating Conditions

Temperature

10 – 50 °C

**Tested up to 75°C with no decrease in performance*

***Ensure to let the CGQ Sensors adjust to the operating temperature for 30 min*

Relative Humidity

0 – 80% (non-condensing)