Raman bIO-Optics

Continuous, inline, multi-component bioprocess measurement

Benefits:
- Immersion optics for multi-component bioprocess measurement
- Compatible with standard bioreactor ports
- Fixed-focus design
- Available in 12 mm diameter with Pg 13.5 threaded connector
- 120, 220, 320, or 420 mm lengths
- Autoclavable

Specs at a glance
- **Sampling probe compatibility** Raman Rxn-10 probe
- **Wetted materials** Body: 316L stainless steel Window: Proprietary material, optimized for bioprocesses Process connection: PG13.5 Surface finish: Ra 15 with electropolish Adhesive: USP Class VI and ISO 10993 compatible
- **Sterilization method** Autoclave

Field of application: Raman bIO-Optics are versatile immersion optics used in conjunction with the Rxn-10 probehead and compatible with standard bioreactor ports. The fixed focus design provides long-term measurement stability along with superior signal performance, essential for transferable, high performance Raman-based bioprocess analysis. Available in industry standard lengths, Raman bIO-Optics are ideally suited for both glass and plastic benchtop bioreactor/fermenter applications requiring headplate entry.

Features and specifications

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Liquids

**Sampling probe compatibility**
Raman Rxn-10 probe

**Sample interface**
Temperature: –30 to 150 °C / -22 to 302 °F

**Pressure**
Max pressure: 13.8 barg / 200 psig

**Wetted materials**
Body: 316L stainless steel
Window: Proprietary material, optimized for bioprocesses
Process connection: PG13.5
Surface finish: Ra 15 with electropolish
Adhesive: USP Class VI and ISO 10993 compatible

**Length**
120, 220, 320, or 420 mm
4.73, 8.67, 12.60, 16.54 inch

**Diameter**
12 mm / 0.48 inch

**Sterilization method**
Autoclave

**Process connection**
PG13.5

More information [www.endress.com/KLBI01](http://www.endress.com/KLBI01)