

Approved materials, which are resistant under sterilization processes

Screw attaches to Ingold port of bioreactor



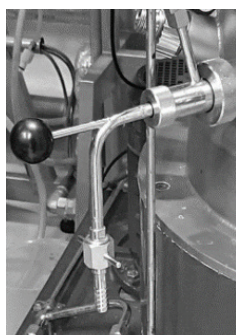
Premium steel frame

Hermetically sealed optical window

ViewPort® Spectrometer Interfaces

Reduced Contamination Risk and Higher Process Yield in Bioreactors

Revolutionary ViewPort® process analytical technology (PAT) components act as spectrometer interfaces on bioreactors without compromising the sterile boundary. ViewPort® provides a hermetically sealed optical window that enables in-situ monitoring of bioprocesses. This reduces contamination risk and enables higher process yield.



FROM Conventional physical sampling

- Risk of cell culture contamination
- Offline analysis required
- Limited flexibility

TO In-situ monitoring with ViewPort®

- Measurement through optical window
- Enables real-time in-situ process control
- Flexibility to change and recalibrate sensors



Product variants

ViewPort® is available in standard versions for well-established multi-use bioreactors as well as customized versions for single-use bioreactors.



ViewPort® PG 13.5
for multi-use glass bioreactors



Approved materials

ViewPort® conforms with applicable regulations and guidelines and is manufactured using materials in accordance with pharma industry best practices.

Sterilizable

The components are conveniently sterilizable under γ -radiation and steam-in-place (SIP) together with entire bioreactor assemblies, removing the need for additional sterilization of the spectrometer probe.



ViewPort® Ingold
for multi-use stainless steel bioreactors



ViewPort® Single-Use
for single-use bioreactors



SCHOTT
glass made of ideas

Flexible, continuous process monitoring with ViewPort®

How ViewPort® is used



1. Connected to standard ports
2. Sterilizable with bioreactor
3. Interface for sensors or spectrometers
4. Real-time monitoring through optical window
5. Exchangeable at any time, while cultivation is running - sterile integrity is maintained
6. Continuing real-time monitoring

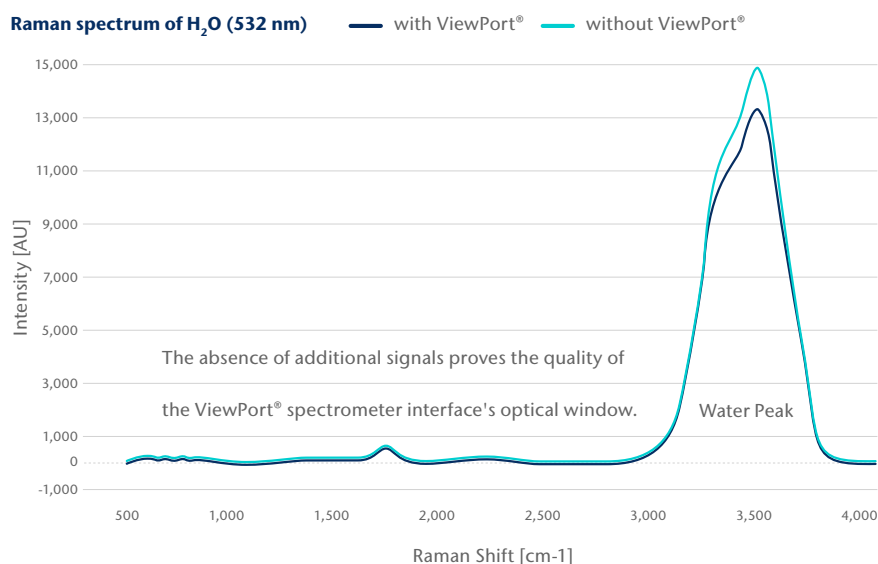
Real-time monitoring

Control and adjustment of key process parameters (e.g. glucoses, biomass, or lipids) in real-time enables optimized yield. SCHOTT is collaborating with reputable companies to combine spectrometers with ViewPort®. Customization is available upon request.



High-performance optical measurements

Made with high-quality SCHOTT glass, the optical window enables the precise transmission of optical signals between sensors and reactants.



Technical details

Type	Port	Raman Transmission	UV Transmission	NIR Transmission	Autoclaving/SIP	Gamma-resistant	Material sensor shaft premium steel	Material sensor shaft PE (USP Class VI)	Sapphire optical window	O-ring EPDM FDA 21 CFR
1	G 1 1/4 inch (Ingold)	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
2	PG 13.5	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
3	Custom	Yes	Yes	Yes	-	Yes	-	Yes	Yes	-

[schott.com/viewport](https://www.schott.com/viewport)

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