

Process Raman analysis

MarqMetrix Proximal BallProbe Sampling Optic (8mm)

A high-performance probe for contactless sampling

High-signal contactless measurement

The Thermo Scientific™ MarqMetrix™ Proximal Probe Sampling Optic is our affordable and high-performance solution for demanding biopharma, pharma, food & beverage, and hazardous chemical applications that require Raman measurements without physically contacting the sample.

The probe's 8mm working distance can analyze samples when an air gap or physical barrier is present.

Exceptional Raman signal throughput

The MarqMetrix Proximal Probe Sampling Optic delivers an extremely high Raman signal throughput, even when the sample is behind windows or semi opaque walls.

Our proprietary sapphire lens delivers an extremely high and clean Raman signal in the fingerprint region, with throughputs that rival our highest performing TouchRaman™ BallProbe end optics.

There is no need to sacrifice range to achieve large volume Raman sampling: when coupled to a Thermo Scientific™ MarqMetrix™ All-In-One Process Raman Analyzer, the MarqMetrix Proximal Probe Sampling Optic offers a full spectral range of 100 -3,250 cm^{-1} . Accurate analysis occurs in seconds, resulting in better real-time decision-making and improved process control.

The simplicity of use allows non-specialists to collect high-quality data



Features and benefits

- Non-contact sampling
- 8mm working distance for measurement through windows, vials, and bags
- High-signal throughput
- Exceptional Raman signal in the fingerprint region

Applications

- Biopharmaceutical manufacturing
- Pharmaceutical manufacturing
- Polymers and plastics processing
- Food and beverage processing
- Hazardous chemical applications



The MarqMetrix Proximal BallProbe Sampling Optic is quick and easy to swap when used with the MarqMetrix Interchangeable Fiber Head.

When combined with the MarqMetrix All-In-One Process Raman Analyzer, the probe offers higher performance and full spectral range with accurate, precise and reproducible results.

Specifications	
Standard probe length	4.0in. (101mm)
Sample working distance	8mm (.31cm)
Continuous operating temperature range	-20 to 100°C
Beam spot size	100µm
Compatible wavelengths	500-1100nm

Materials of construction	
Probe dimensions	1/2in.(12.7mm) OD Stainless Steel
Optics	Sapphire sampling lens
Sealing materials	High temperature composite adhesive

Operating conditions	
MarqMetrix Proximal Probe Sampling Optic is intended for use in non-contact sampling, but will withstand intermittent immersion in mild chemical solutions	



MarqMetrix Proximal Probe Sampling Optic with vial accessory.

Optical properties
High-performance optics with signal intensities similar to the highest-performing TouchRaman™ BallProbe™ end optics
Made with high purity UV-grade sapphire lens aligned along the C-axis, eliminating response variability due to birefringence
Inquire for custom working distance MarqMetrix Proximal Probe Sampling Optic end optics



High performance optic allows analysis through packaging.

Related products
MarqMetrix Proximal Probe Sampling Optic (100mm) designed for high-volume non-contact sampling
Thermo Scientific™ MarqMetrix™ Performance BallProbe™ Sampling Optic
Vial Holder Accessory - allows user to easily make highly reproducible Raman measurements of powders and liquids stored in glass vials

Learn more at thermofisher.com/marqmetrixAIO

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