



**CONTACT US** 



# CONTACTFREE PROBE (8mm)

A high-performance probe for contactless sampling

#### HIGH-SIGNAL CONTACTLESS MEASUREMENT

The MarqMetrix® ContactFree Probe is our affordable and high-performance solution for demanding biopharma, pharma, food and 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 ContactFree Probe 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<sup>™</sup> BallProbe<sup>®</sup> end optics.

There is no need to sacrifice range to achieve large volume Raman sampling: when coupled to a MarqMetrix All-In-One Process Raman System, the ContactFree Probe offers a full spectral range of 100 -3250cm<sup>-1</sup>. Accurate analysis occurs in seconds, resulting in better real-time decision-making and improved process control.

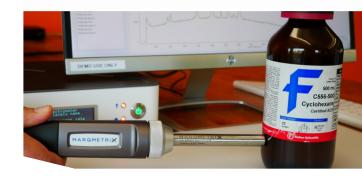
The simplicity of use allows non-specialists to collect high-quality data

#### **FEATURES & 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**

- Biopharmaceuticals manufacturing
- · Pharmaceuticals manufacturing
- · Polymers and plastics processing
- · Food and beverage processing
- Hazardous chemical applications





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The power of Raman, the simplicity of MarqMetrix

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## **ADDITIONAL FEATURES**

The probe is quick and easy to swap when used with the MarqMetrix InterXc fiber head.

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



# SPECIFICATIONS:

#### **Specifications**

Standard probe length	4.0in. (101mm)
Clear aperture (max. laser beam waist)	0.275in. (7.1mm)
Sample working distance	8mm (.31cm)
Continuous operating temperature range	-20 to 100°C
Effective spectral range	100-3250cm <sup>-1</sup>
Beam spot size	<500mm
Compatible laser wavelength	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**

ContactFree Probe is intended for use in non-contact sampling, but will withstand intermittent immersion in mild chemical solutions

# High performance optic allows analysis through packaging



#### **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 ContactFree probes

#### **Related Products**

**ContactFree HV Probe (100mm)** - designed for high-volume non-contact sampling

**Performance BallProbe**\* - designed to withstand moderate chemical environments in laboratory and industrial settings



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