



MARQMETRIX®

MEASUREMENT MADE SIMPLE

CONTACT US

## FIBER BALLPROBE®

with TouchRaman® immersion technology

### DESIGNED ACCURATE & EASY MEASUREMENTS

The MarqMetrix® Fiber BallProbe® is a complete Raman sampling solution, the link between your Raman analytical system and your sample. Our patented BallProbe technology at the sample interface provides the simplest and most reliable path to making accurate and repeatable Raman measurements.

The MarqMetrix Fiber BallProbe consists of two parts: the FiberHead and the BallProbe. The FiberHead integrates the fiber optics, Raman filters and optical components into a compact ergonomic design. The BallProbe is the sample interface, a patented optical system featuring a high-purity sapphire spherical lens that enables TouchRaman®.

### SIMPLY TOUCH & MEASURE

Simply touching the BallProbe to the sample yields highly reproducible sampling of liquids, solids, slurries, powders and heterogeneous mixtures.

The BallProbe is available in a variety of material and diameter configurations to meet the most demanding sampling requirements.

Reduced sampling  
variation and remarkable  
ease-of-use in a simple design



### FEATURES & BENEFITS

- Accurate and repeatable measurements
- TouchRaman enabled for easy touch measurements
- Reproducible sampling of liquids, solids, slurries, powders and heterogeneous mixtures
- Simple design for easy integration and usability

### APPLICATIONS

- Biopharmaceutical manufacturing
- Pharmaceutical manufacturing
- Food and beverage processing
- Polymer and plastic manufacturing
- Hazardous chemical applications



For more information contact:

**206-971-3625**

info@marqmetrix.com

The power of Raman, the simplicity of MarqMetrix

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# FIBER BALLPROBE

with TouchRaman® immersion technology



Fiber BallProbe's FiberHead is available in two models: standard interchangeable for use with multiple probes, or fixed for single-probe use.

The interchangeable FiberHead gives you the flexibility of use in different applications at different points of measurement.

The fixed FiberHead is ideal for established processes where a permanently secured sampling interface is required.

## Specifications

<b>Excitation Fiber, Connector</b>	105µm Low-OH, FC/PC
<b>Collection Fiber, Connector</b>	200µm Low-OH, FC/PC
<b>FiberHead Material</b>	Anodized Aluminum
<b>Sample Working Distance</b>	TouchRaman (sample contacts BallProbe lens)
<b>Pressured Design Condition</b>	6,000psi (413 bar)
<b>Compatible Wavelengths</b>	785nm *532nm available as a custom item

## Related Products

<b>All-In-One Process Raman System</b> - A single-unit spectrometer, laser, and acquisition computer
<b>Performance BallProbe®</b> - designed to withstand moderate chemical environments in laboratory and industrial settings
<b>Process BallProbe®</b> - our most robust BallProbe, for demanding process or laboratory applications
<b>FlowCell™</b> - designed for integration into continuous flow chemistry and reaction monitoring applications
<b>BioReactor BallProbe®</b> - designed for bioprocess applications, sterilizable via autoclave/CIP/SIP, compatible with standard Pg13.5 ports



## BallProbe Immersion Optic Models

<b>Performance BallProbe® - 0.5 in. (0.5 in. OD, 8.5 in. length)</b>	Hastelloy C276, 8mm spherical optic, epoxy seal
<b>Process BallProbe® - 0.5 in. (0.5 in. OD, 11 in. length)</b>	Hastelloy C276, 6mm spherical optic, gold seal
<b>Process BallProbe® - 0.375 in. (0.375 in. OD, 8.5 in. length)</b>	Hastelloy C276, 6mm spherical optic, gold seal
<b>BallProbe® - 0.25 in. (0.25 in. OD, 4 in. length)</b>	Stainless steel 316L, 6mm spherical optic, epoxy seal
<b>BallProbe® - 0.125 in. (0.125 in. OD, 1 in. length)</b>	Hastelloy C276, 6mm spherical optic, perfluorelastomer (Kalrez®) or gold seal
<b>FlowCell™</b>	Hastelloy C276, 6mm spherical optic, perfluorelastomer
<b>BioReactor BallProbe®</b>	Stainless steel 316L, 12mm dia, 220mm or 120mm immersion length, Pg13.5 fitting
<b>Custom Options Available</b>	Contact MarqMetrix

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