



MARQMETRIX®

MEASUREMENT MADE SIMPLE

CONTACT US

## BIOREACTOR BALLPROBE®

with TouchRaman® immersion technology

### ENGINEERED FOR REPETABLE MEASUREMENTS

The MarqMetrix® BioReactor BallProbe® is designed specifically to meet the requirements of the bioprocess industry. With the durability to handle the rigors of sterile practices, including CIP/SIP and offline autoclaving, the BioReactor BallProbe is precisely manufactured for repeatable measurements batch-to-batch, probe-to-probe, and month-to-month.

### SANITARY CONSTRUCTION FOR BIOPROCESSING

Made from sanitary finished (15Ra) 316L stainless steel and exclusively sourced high-purity sapphire optics, the simplicity of design prompts an ease of use that eliminates user-to-user variation.

The form factor of the BioReactor BallProbe is matched to the classic design of dissolved oxygen (DO) bioprocess probes—12mm diameter, Pg13.5 fittings, with 220mm and 120mm immersion lengths. The BioReactor BallProbe comes with a stainless steel protective cap that shields the internal optics of the probe during autoclaving and storage.

Simple design  
for ease of use  
and consistent measurements



### FEATURES & BENEFITS

- Accurate and repeatable measurements
- Durable design, resistant to sterilization (CIP/SIP)
- Protective cap shields the probe's internal optics during autoclaving and storage
- Compatible with standard Pg13.5 ports
- Ease of use eliminates user-to-user variation

### APPLICATIONS

- Biopharmaceutical manufacturing
- Pharmaceutical manufacturing



For more information contact:

**206-971-3625**

info@marqmetrix.com

The power of Raman, the simplicity of MarqMetrix

Visit [MarqMetrix.com](http://MarqMetrix.com)



# BIOREACTOR BALLPROBE

with TouchRaman® immersion technology



The utility of the BioReactor BallProbe is optimized when paired with our filtered fiber-optic interface, creating the MarqMetrix Fiber BallProbe—a complete sampling solution for accurate and repeatable Raman measurements.

However, the BioReactor BallProbe can be purchased as a stand-alone product for use with existing fiber-optic Raman probes.

## Wetted Materials

Probe Body	12mm diameter 316L Stainless Steel Sanitary finish 15Ra
Immersion Optics	8.00mm diameter UV-grade sapphire ball
Sealing Materials	High-temperature epoxy

## Specifications

Standard Probe Length	220mm or 120mm (immersion)
Probe OD (Outside Diameter)	0.472 in. (12.0mm)
Sample Working Distance	TouchRaman (sample contacts BallProbe lens)
Continuous Operating Temperature Range	-20°C to 150°C
Pressured Design Condition	6,000psi (413 bar)
Compatible Wavelengths	500-1100nm
Fittings	Pg13.5, with beveled Telfon washer and viton o-ring



## Operating Conditions

Suitable for intermittent exposure to most dilute and concentrated acids (hot & cold), bases and most organic solvents including ethanol, THF, ethyl acetate, acetone, DCM, toluene, pentane and acetonitrile

Avoid exposure to aqua regia, heated formic acid, mixed acid, TFAA

## Related Products

**All-In-One Process Raman System** - a single-unit spectrometer, laser, and acquisition computer

**Fiber BallProbe®** - filtered fiber optic interface specifically designed for the MarqMetrix BallProbe and All-In-One system

# MARQMETRIX®

For more information call:

**206-971-3625**

info@marqmetrix.com

MarqMetrix.com

8025 v1.1

U.S. Patent No. 6,977,729 B2

