

Process Raman analysis

# MarqMetrix Fiber Heads

## The link between your system and sampling

### Compact, durable & ergonomic design

The Thermo Scientific™ MarqMetrix™ Fiber Head line integrates fiber optics, Raman filters, and optical components into a compact and ergonomic design.

The interchangeable MarqMetrix Fiber Head is available in two models: standard interchangeable for use with multiple probes, or fixed for single-probe use.

The interchangeable MarqMetrix Fiber Head gives you the flexibility of use in different applications at different points of measurement.

The fixed MarqMetrix Fiber Head is ideal for established processes where an immovable sampling interface is required.

### Safety features

The standard MarqMetrix Fiber Head has a built-in interlock feature that safely disables the laser if the fiber assembly is severed.

For explosive atmosphere applications that require inherently safe equipment, Thermo Fisher Scientific offers a non-interlocked, nonindicating, optical-only Fiber Head.

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



### Features and benefits

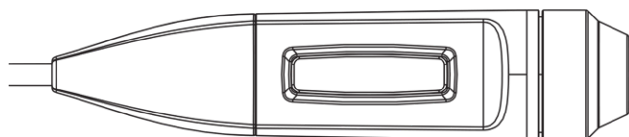
- Ergonomic design available in two options, interchangeable or fixed:
  - Standard Interchangeable model (FP-313) that can be used with multiple sample interfaces (Thermo Scientific™ MarqMetrix™ BallProbe or FlowCell™ Sampling Optic.)
  - Fixed model (FP-113) with a permanently attached MarqMetrix BallProbe Sampling Optic or MarqMetrix FlowCell Sampling Optic
- Durable and compact construction
- Probe swap functionality reduces downtime

### Applications

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

## Configurations

### Fiber Head



### MarqMetrix Fiber Head models

Ergonomic design available in two options:

- Standard Interchangeable model (FP-313)
- Fixed model (FP-113)

### Safety features

- LED indicator for laser power on\*
- Interlock shuts off laser power if fiber assembly is severed\*

\* FP-313 model only, optical only model is non-interlocked and non-indicating

Specifications	
Excitation fiber (Connector)	105µm Low-OH, FC/PC
Collection fiber (Connector)	200µm Low-OH, FC/PC
Fiber head material	Anodized aluminum sample
Working distance	TouchRaman™ (sample contacts BallProbe™ lens), 8mm & 100mm for Thermo Scientific™ MarqMetrix™ Proximal Probe Sampling Optic
Effective spectral range	100-3250cm <sup>-1</sup>
Compatible wavelengths	785nm

### Sampling interface



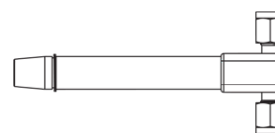
MarqMetrix BallProbe Sampling Optic or MarqMetrix Proximal Probe Sampling Optic

-or-



MarqMetrix Bioreactor BallProbe Sampling Optic

-or-



MarqMetrix FlowCell Sampling Optic

### Operating conditions

1°C-70°C, non-condensing humidity

### Related products

Thermo Scientific™ MarqMetrix™ All-In-One Process Raman Analyzer

Thermo Scientific™ MarqMetrix™ Performance BallProbe™ Sampling Optic - designed to withstand moderate chemical environments in laboratory and industrial settings

Thermo Scientific™ MarqMetrix™ Process BallProbe™ Sampling Optic - our most robust BallProbe, for demanding process or laboratory applications

Thermo Scientific™ MarqMetrix™ FlowCell™ Sampling Optic - designed for integration into continuous flow chemistry and reaction monitoring applications

Thermo Scientific™ MarqMetrix™ BioReactor BallProbe™ Sampling Optic - designed for bioprocess applications, sterilizable via autoclave/CIP/SIP, compatible with standard Pg13.5 ports

Thermo Scientific™ MarqMetrix™ Proximal Probe Sampling Optic - Non-contact sampling probes for the analysis of in-motion samples through physical barriers

Learn more at [thermofisher.com/marqmetrixAIO](https://thermofisher.com/marqmetrixAIO)

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