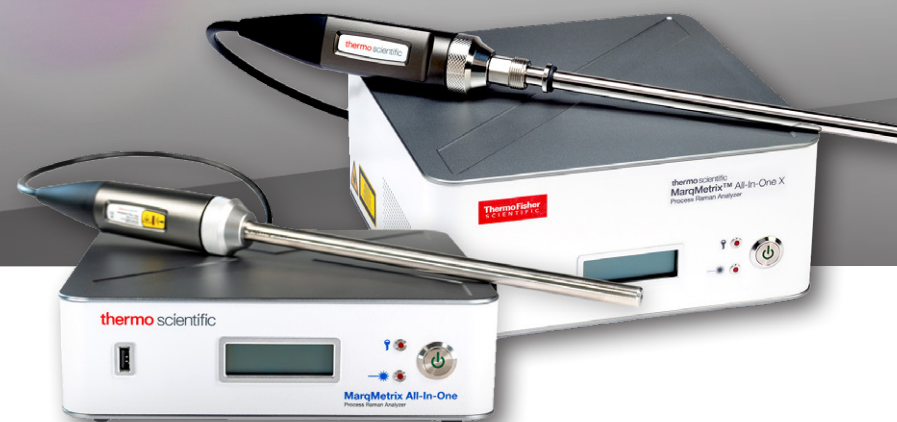




Continuous insight at
every critical moment

MarqMetrix All-In-One
Process Raman Analyzers

Performance you can measure.
Answers you can trust.



Introduction

In every manufacturing environment, success depends on clarity, understanding your process well enough to make the right decisions faster. But with increasing demands for throughput, precision, and compliance, many traditional analytical systems leave you sorting through complexity instead of delivering insight.

The Thermo Scientific™ MarqMetrix™ All-In-One and Thermo Scientific™ MarqMetrix™ All-In-One X Process Raman Analyzers are built to transform how you work. By integrating industry-leading optics and a cost-efficient design with ease of use, they deliver clear, actionable answers to help optimize your process without compromise.

Whether you are refining production parameters, validating new methods, or ensuring quality consistency, the MarqMetrix platform empowers you to move seamlessly from measurement to improvement with confidence and precision.

Trusted by these industries and more:

- Pharmaceutical and biopharmaceutical manufacturing
- Downstream and midstream oil & gas
- Chemical processing
- Polymer extrusion & manufacturing
- Materials science
- Food & beverage



Designed for hazardous locations, including Class I, Division 1 and ATEX/IECEx Zone 0 environments.

Features

1

Lower total cost of ownership with a solution that runs leaner and smarter

- No consumables or carrier gases — eliminates recurring costs
- Minimal maintenance needs — leads to less downtime, fewer service contracts
- Fast, in-line measurement — reduces lab reliance and improves process efficiency

2

Engineered for continuous and safe operation, even in demanding environments

- No calibration needed — stable, factory-set performance delivers consistent results across instruments
- Modular multiplex architecture prevents single-point operational failures
- ATEX, IECEx and NEC certified for hazardous locations

3

Simple to install, easy to operate, and designed to replicate success across your entire process

- Fast integration: plug-and-play with existing process infrastructure
- Minimal training required: get operators up to speed quickly
- Flexible deployment: work across multiple units and sites

4

Make confident decisions with accurate, real-time insight at every step

- Real-time compositional data for immediate decision-making
- High chemical specificity with clear resolution of molecular components
- Support for various communication protocols, including OPC, Modbus and more, for seamless integration with process control systems
- In-line monitoring to maintain consistency and safeguards performance

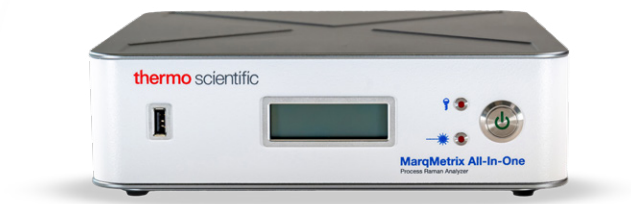
Real-time insight. Real process impact.

The MarqMetrix™ process Raman analyzer empowers your team with the data and confidence to move faster, optimize performance, and drive results.



What is modular multiplexing?

Our unique modular multiplexing approach is a distributed, multi-point sensing architecture that uses compact, independent analyzers to collect real-time data.



Real-time, not near-time

Our network of Raman analyzers collects data from all points simultaneously, not sequentially.



Reliability

Modular configuration ensures that when one unit is out of service, others remain operational.



Proximity & coverage

The MarqMetrix All-In-One's compact size enables installation close to the process.



Low maintenance, high ROI

Minimal maintenance and maximum uptime with quick swap-in servicing generates faster return on your investment.



Effortless control & complete insight

Lykos PAT software can connect and visualize process data of up to four instruments.

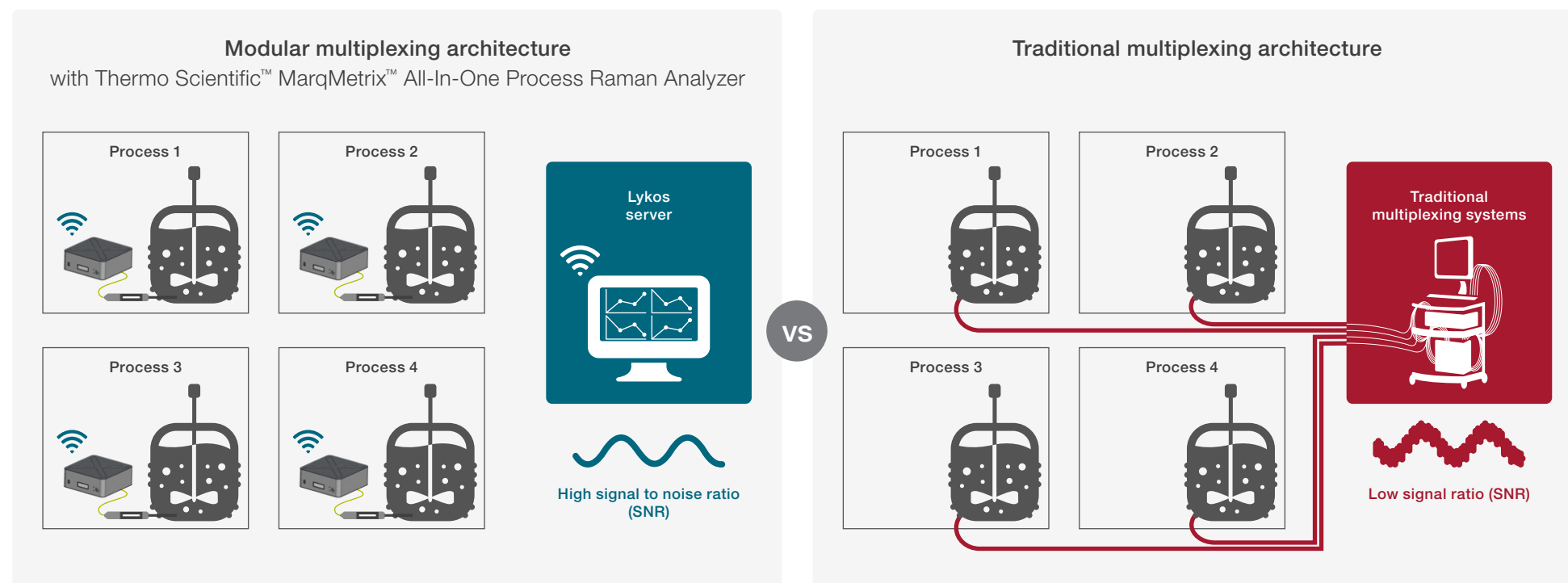
2x faster ROI. Lower cost. Built to scale.

Compared to traditional multiplexing, our modular architecture delivers ROI 2x faster by lowering capital and operating costs while enabling greater scalability, and global method transferability.

Cost considerations	Traditional multiplex	Modular multiplex
Capital expense (CapEx)	High	30 - 40% less
Operational expense (OpEx)	High	40 - 50% less
Downtime & troubleshooting	High	Low
Technical considerations	Traditional multiplex	Modular multiplex
Spectral resolution	Comparable	Comparable
Scan times	Slow, sequential scans	Fast, simultaneous scans, up to 24x faster
Signal to noise (SNR)	Low	Up to 3x Higher

How does modular multiplexing work?

Real-time process insight, not near-time: Achieve true real-time insights with parallel data collection across multiple measurement points, eliminating the delays of traditional multiplexing architecture.



More points. More insight. All in real time.

Our modular multiplexing approach delivers true real-time, simultaneous data across multiple points—so you can act with confidence, faster

Key applications

From upstream to downstream, Process Raman delivers real-time insight across critical operations and industries.

Upstream biopharma

- Track nutrient consumption and metabolite production
- Monitor cell growth and viability
- Enable automated feedback control
- Monitor viral vectors
- Monitor nucleic acid and cell therapy

Downstream oil & gas

- Certification of gasoline blends
- Refined fuel property analysis
- Analysis of interfacial boundary in fuel pipelines
- Petrochemical process monitoring

Pharma

- Reaction and crystallization monitoring
- API dissolution monitoring
- Blend uniformity and solid dose manufacturing

Downstream biopharma

- Solid API and excipient monitoring
- Liquid API and excipient monitoring
- Automated control of UF/DF
- Nucleic acid and cell therapy monitoring

Midstream oil & gas

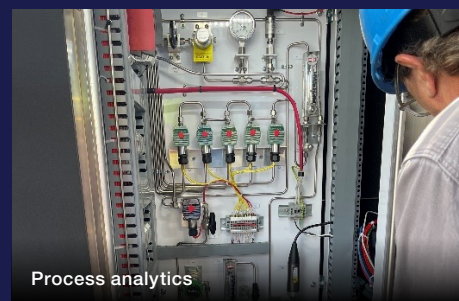
- C1-C6+, Co2, H2 and N2 analysis
- LPG blending and optimization
- Aromatic and olefin monitoring
- Checking methane levels in y-grade

Polymers & chemicals

- Reaction monitoring
- Polymorph analysis
- Reactive-extrusion monitoring
- Polymer blend composition analysis

Process Raman in action

Real-world results. Real-time insight. Across industries and process environments.



Sampling optics selection guide

Find the right sampling optic for your process and measurement needs

1. Choose your measurement type and application

Immersion

Bioprocess

Extrusion

Oil & gas

Chemicals

Other

Flow

Bioprocess

Oil & gas

Chemicals

Non-contact

Bioprocess

Chemicals

Other

2. Define process conditions

Chemical environment

Corrosive/oxidative

Mild aqueous

Process setup

Single-use

Autoclavable

Connection type

Flanged

Non-flanged

Temperature range

-20°C to 300°C

20°C to 150°C

Installation type

Fixed

Removable

Single use

Maximum pressure (system rating)

50 psi

9,000 psi

Select the system rating that matches or exceeds your maximum operating pressure.

Spot size

100 µm (spot size)

1.0 mm (spot size)

3.5 mm (spot size)

Focal distance

8mm (focal distance)

47 mm (focal distance)

100 mm (focal distance)

3. Recommended optic type by configuration



Thermo Scientific™ MarqMetrix™ Single Use Bioreactor BallProbe™ Sampling Optic
Optimized for single-use bioreactor applications.

BioprocessSingle-use



Thermo Scientific™ MarqMetrix™ BioReactor BallProbe™ Sampling Optic (Flanged)
For autoclaveable bioreactor systems with flanged connections.

BioprocessAutoclavableFlanged



Thermo Scientific™ MarqMetrix™ BioReactor BallProbe™ Sampling Optic (Non-flanged)
For autoclaveable bioreactor systems with non-flanged connections.

BioprocessAutoclavableFlanged



Thermo Scientific™ MarqMetrix™ Threaded BallProbe™ Sampling Optic
Ideal for extrusion process monitoring.

Extrusion



Thermo Scientific™ MarqMetrix™ BallProbe™ Process Sampling Optic
Built for harsh and aggressive process environments.

Oil & gasChemicalsOther

Corrosive/oxidative applications20°C to 300°C



Thermo Scientific™ MarqMetrix™ BallProbe™ Performance Sampling Optic
Optimized for moderate temperature and precision measurement.

OtherMild aqueous applications-20°C to 300°C



Thermo Scientific™ MarqMetrix™ FlowCell™ Sampling Optic
Versatile flow cell for high pressure process applications.

BioprocessOil & gasChemicals

Fixed500 – 9,000 psi



Thermo Scientific™ MarqMetrix™ FlowCell™ Sampling Optic (Removeable)
Removeable FlowCell for high-pressure process applications.

BioprocessOil & gasChemicals

Removable4,000 psi



Thermo Scientific™ MarqMetrix™ FlowCell Sampling Optic (Single-use)
Single-use flow cell for process applications.

BioprocessOil & gasChemicals

Single-use50 psi



Thermo Scientific™ MarqMetrix™ Proximal BallProbe™ Sampling Optic

BioprocessChemicalsOther

100 µm (spot size)8 mm (focal distance)



Thermo Scientific™ MarqMetrix™ Proximal Probe Sampling Optic HV (High-Volume)
High-visibility non-contact probe for flexible standoff measurements.

BioprocessChemicalsOther

1.0 mm (spot size)3.5 mm (spot size)

47 mm (focal distance)100 mm (focal distance)

Software

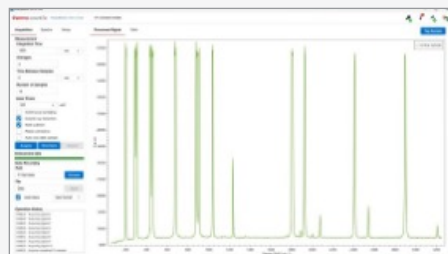
The link between your analyzer and answers

Thermo Scientific™ MarqMetrix™ software solutions are designed for ease of use and integration with process control systems.

For training data collection

Spexware

Ideal for R&D application

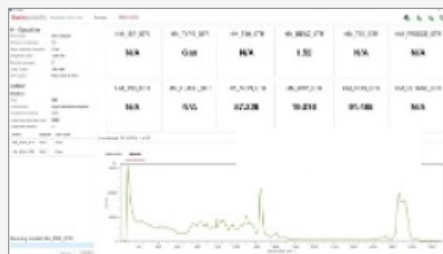


-  Collect spectra
-  Basic comparison
-  Local & network save

For in-line predictions

Runspex

Ideal for industrial manufacturing



-  Chemometric predictions
-  PLS models
-  Modbus, OPC-UA
-  Local & network save
-  Installed on MarqMetrix process Raman analyzer
-  Eigenvector (.xml) & MATLAB models (.mat)

For in-line predictions

Lykos

Ideal for pharma/biopharma



-  21 CFR 11 compliance
-  Chemometric predictions
-  PLS, PCA & PLSDA models
-  OPC-UA
-  Local and network save
-  Installed on server
-  Eigenvector models (.xml)

Technical specifications

Thermo Scientific MarqMetrix All-In-One Process Raman Analyzer

Specifications	MarqMetrix All-In-One Process Raman Analyzer	MarqMetrix All-In-One X Process Raman Analyzer
Certifications/compliance	Laser certification: Class 3B laser device Reported to the FDA	Laser certification: Class 3B laser device Reported to the FDA ATEX zone 0, IECEx, and class 1 division 1 certified
Dimensions	25 (L) x 25 (W) x 7.7 (H)	25 (L) x 25 (W) x 11.4 (H)
Dark noise	≤16.5 counts at 10 sec. integration	≤16.5 counts at 10 sec. integration
Detector	Thermally stabilized CCD (2 stage TEC)	Thermally stabilized CCD (2 stage TEC)
Electrical requirements	Hertz: 50/60 Hz	Hertz: 50/60 Hz
Fiber conditions	FC/PC (Both excitation and collection)	FC/PC (Both excitation and collection)
Includes	Wireless mouse, HDMI cable, monitor	Wireless mouse, HDMI cable, monitor
Laser power	Laser excitation wavelength: 785 nm Excitation power: up to 450 mW	Laser excitation wavelength: 785 nm Excitation power: 35 mW (maximum allowable laser energy in ATEX Zone 0 environments)
Operating temperature range	15°C to 33°C	15°C to 33°C
Ports	1RJ-45 Ethernet port 3 USB 3.0	1RJ-45 Ethernet port 3 USB 3.0
Resolution	Spectral resolution: 6.5 cm ⁻¹ average across spectral range	Spectral resolution: 6.5 cm ⁻¹ average across spectral range
Safety features	1 keyed laser interlock switch Electronic laser trigger	1 keyed laser interlock switch Electronic laser trigger
Software details	MarqMetrix Raman suite controller: Integrated PC (Windows 10 OS) Lykos PAT Software	MarqMetrix Raman suite controller: Integrated PC (Windows 10 OS) Lykos PAT Software
Spectral range	100 to 3250 cm ⁻¹	100 to 3250 cm ⁻¹
Hardware calibration frequency	None – factory calibrated	None – factory calibrated

Parts catalog

Instrument

Part no.	Description	Product family
912A1258	Thermo Scientific MarqMetrix All-In-One Process Raman Analyzer Base Instrument	MarqMetrix All-In-One process Raman analyzer
912A1295	Thermo Scientific MarqMetrix All-In-One Process Raman Analyzer X Base Instrument	MarqMetrix All-In-One X process Raman analyzer

FiberHeads

Part no.	Description	Product family
840-399800	FiberHead (standalone, no optic)	MarqMetrix All-In-One process Raman analyzer
840-408200	FiberHead (Standalone, no optic)	
840-400900	FiberHead for Single-use optics	
840-409500	FiberHead (standalone, no optic)	MarqMetrix All-In-One X process Raman analyzer

Immersion BallProbes

Bioreactor BallProbes					
Part no.	Description	Dimensions	Temperature & pressure ratings	Wetted materials	Product family
840-402300	Bioreactor Performance BallProbe, 120 mm, PG 13.5 fitting	L: 120 mm Dia: 12 mm	T: up to 150 °C P: 6000 psi	SS316L, epoxy, sapphire, viton o-ring	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-402400	Bioreactor Performance BallProbe, 220mm, PG 13.5 fitting	L: 220 mm Dia: 12 mm			
840-412500	Bioreactor Performance BallProbe, 320mm, PG 13.5 fitting	L: 320 mm Dia: 12 mm			
840-412600	Bioreactor Performance BallProbe, 420mm, PG 13.5 fitting	L: 420 mm Dia: 12 mm			
840-402500	Flanged Bioreactor Performance BallProbe, PG 13.5 fitting	L: 123 mm Dia: 12 mm			
840-402600	Flanged BioReactor Performance BallProbe, 223mm, PG 13.5 fitting	L: 223 mm Dia: 12 mm			

Immersion BallProbes cont.

Single-Use Bioreactor BallProbes

Part no.	Description	Dimensions	Temperature & pressure ratings	Wetted materials	Product family
840-401000	Flanged Bioreactor BallProbe, Single-use, 90 mm, PG 13.5 fitting	L: 90 mm Dia: 12 mm	T: up to 150 °C P: 6000 psi	SS316L, epoxy, sapphire, silicon o-ring	MarqMetrix All-In-One process Raman analyzer
840-401100	Flanged Bioreactor BallProbe, Single-use, 123 mm, PG 13.5 fitting	L: 123 mm Dia: 12 mm			
840-401200	Flanged Bioreactor BallProbe, Single-use, 223 mm, PG 13.5 fitting	L: 223 mm Dia: 12 mm			
840-412700	Flanged Bioreactor BallProbe, Single-use, 323 mm, PG 13.5 fitting	L: 323 mm Dia: 12 mm			
840-412800	Flanged Bioreactor Ballprobe, Single-use, 423 mm, PG 13.5 fitting	L: 423 mm Dia: 12 mm			

Process BallProbes

Part no.	Description	Dimensions	Temperature & pressure ratings	Wetted materials	Product family
840-401900	Process BallProbe, ½ inch	L: 254 mm Dia: ½ inch	T: cryogenic to 300 °C P: 6000 psi	Hastelloy C276, gold, sapphire	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-402000	Process BallProbe, 3/8 inch	L: 228 mm Dia: 3/8 inch			
840-404800	Process BallProbe ¼ inch	L: 100 mm Dia: ¼ inch			

Performance BallProbes

Part no.	Description	Dimensions	Temperature & pressure ratings	Wetted materials	Product family
840-401300	Performance BallProbe, ½ inch	L: 200 mm Dia: ½ inch	T: -20 °C to 150 °C P: 6000 psi	SS316L, epoxy, sapphire	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-401700	Performance BallProbe, ¼ inch	L: 100 mm Dia: ¼ inch			
840-401800	Performance BallProbe, 1/8 inch	L: 25 mm Dia: 1/8 inch			

Threaded BallProbes

Part no.	Description	Dimensions	Temperature & pressure ratings	Wetted materials	Product family
840-402100	Threaded Process BallProbe, ½-20 UNF Thread	L: 200 mm Dia: ½ inch	T: -20 °C to 300 °C P: 6000 psi	SS316L, gold, sapphire	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-402200	Threaded Performance BallProbe, ½-20 UNF Thread	L: 200 mm Dia: ½ inch	T: -20 °C to 150 °C P: 6000 psi	SS316L, epoxy, sapphire	

Flowcell BallProbes

FlowCell BallProbes					
Part no.	Description	Flow path	Temperature & pressure ratings	Metallurgy	Product family
840-402700	Low-Pressure FlowCell	Fitting: 1/8-inch Swagelok Female Volume: 180 µL	T: -20 to 250 °C P: 500 psi	Hastelloy C276, Kalrez, sapphire	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-402800	Medium-Pressure FlowCell	Fitting: 1/8-inch Swagelok Female Volume: 100 µL	T: cryogenic to 350 °C P: 2500 psi	Hastelloy C276, gold, sapphire	
840-403000	High-Pressure FlowCell	Fitting: 1/4-inch HIP LF4 Female Volume: 180 µL	T: cryogenic to 350 °C P: 9000 psi	Inconel 625, gold, sapphire	
840-403100	Removable FlowCell	Fitting: 1/8-inch Swagelok Female Volume: 200 µL	T: cryogenic to 350 °C P: 4000 psi	Hastelloy C276, gold, sapphire	
840-403200	Removable FlowCell	Fitting: 1/4-inch Swagelok Female Volume: 700 µL			
840-403300	Removable FlowCell	Fitting: 3/8-inch Swagelok Female Volume: 2 mL			
840-403400	Removable FlowCell	Fitting: 1/2-inch Swagelok Female Volume: 3.4 mL			
840-403500	Removable FlowCell	Fitting: Tri-clamp Volume: 7.0 mL			
Single-Use FlowCell Ballprobes					
Part no.	Description	Flow path	Temperature & pressure ratings	Metallurgy	Product family
840-407600	Single-use FlowCell	Fitting: Barb connector for 1/8 inch tube Volume: 200 µL	T: Up to 150 °C P: 50 psi	SS316L, silicon o-ring, sapphire, animal-free polypropylene	MarqMetrix All-In-One process Raman analyzer
840-407700	Single-use FlowCell	Fitting: Luer lock, Female Volume: 200 µL		SS316L, silicon o-ring, sapphire, nylon	
840-407800	Single-use FlowCell	Fitting: Luer lock, Male Volume: 200 µL			
840-407900	Single-use FlowCell	Fitting: Luer lock, Male & Female Volume: 200 µL			
840-408000	Single-use FlowCell	Fitting: Tri-clamp, Mini (TC25) Volume: 200 µL	T: Up to 150 °C P: 500 psi	SS316L, silicon o-ring, sapphire	

Non-contact

Proximal BallProbes

Part no.	Description	Dimensions	Temperature & pressure ratings	Metallurgy	Product family
840-401400	Proximal BallProbe, 8mm Working Distance	L: 100 mm Dia: 14.3 mm (½ inch)	T: -20 °C to 100 °C P: N/A, non-immersion	SS316L, epoxy, sapphire	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-401600	Proximal BallProbe 47mm Working Distance	L: 77 mm Dia: 14.3 mm		SS316L, epoxy, BK-7	
840-401500	Proximal BallProbe, 100mm Working Distance	L: 77 mm Dia: 14.3 mm		SS316L, epoxy, BK-7	

Accessories

Jumper Cables & Accessories

Part no.	Description			Product family
840-397500	Jumper Fiber Assembly, 5 m	5 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	MarqMetrix All-In-One process Raman analyzer
840-397600	Jumper Fiber Assembly, 10 m	10 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-397700	Jumper Fiber Assembly, 25 m	25 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-397800	Jumper Fiber Assembly, 50 m	50 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-397900	Jumper Fiber Assembly, 100 m	100 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-418100	Jumper Fiber Assembly, 5 m	5 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	MarqMetrix All-In-One X process Raman analyzer
840-418200	Jumper Fiber Assembly, 10 m	10 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-418300	Jumper Fiber Assembly, 25 m	25 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-418400	Jumper Fiber Assembly, 50 m	50 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-418500	Jumper Fiber Assembly, 100 m	100 m L, FC/FC connectors, stainless steel jacket armor	Core dia of 105 µm for excitation & 200 µm for collection	
840-398000	Machined Vial holder for Proximal BallProbe, 8mm	Compatible with 20 mL scintillation (40 mm dia) & NIR transmission vials (8 mm dia)		MarqMetrix All-In-One/ All-In-One X process Raman analyzers
840-404000	Polystyrene Check Standard	Verification & PQ standard w/ calibration certificate Compatible with ~1/2 in Process and Bioreactor BallProbes		
840-407500	ANSI 300 Flange NPS 1	4 x 0.75-inch Bolt Holes on 3.5 inch Bolt Circle dia 4.88 in Flange dia, Stainless Steel		
840-398100	Adaptor, FC-201 FlowCell, Set of Two	Connection to female Luerlok connectors (flexible tubing) Compatible with stainless steel, PTFE, PEEK, PP & tefzel		
840-398200	Adaptor, FC-201 FlowCell, Set of Two	Connection to male Luerlok connectors (syringes) Compatible with stainless steel, PTFE, PEEK, PP & tefzel		
840-402900	Adaptor, Bioreactor FlowCell	SS316L, optical connection w/ flanged bioreactor BallProbe Upchurch ZDV Finger tight 10-32 fitting		

Software

Software Products & Software Updates

Part no.	Description	Product family
837-006500	Lykos PAT Software 21 CFR Part 11 compliant, OPC connectivity, up to 30 users Supports PLS, PCA & PLSDA model types, .xml file type	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
833-078100	Eigenvector Solo+Model_Exporter Chemometric model building & exporting Export .xml and .mat file formats	
837-005400	Software Update, Raman Software Suite Software updates for RSS version 1.3.3 or later	

Spare parts

Spare Parts

Part no.	Description	Product family
714-257600	Beveled Teflon Washer Viton O-ring for standard Bioreactor BallProbes	MarqMetrix All-In-One/ All-In-One X process Raman analyzers
714-257700	PG 13.5 Nut Includes beveled Teflon washer & Viton O-ring for standard Bioreactor BallProbes	
714-258100	Remote Interlock Jumper	
714-258200	Interlock Keys	
714-259600	Fiber Optic Caps	
714-259500	FC-FC Mating Sleeve Replacement Kit, Qty 2 of FC-FC mating sleeve, washer, nut, Qty 4 of fiber optics caps, rubber bumper & clean wipes	

Service plans

We offer a variety of service plans designed to maximize productivity and optimize performance throughout the lifecycle of your MarqMetrix All-In-One Process Raman Analyzer.

Plans include exclusive service advantages such as:

- Unlimited technical support
- Depot repair services
- Maintenance of system compliance
- Consulting services

You can also ask us about assistance in developing tailored chemometric models and model reports to ensure your success with the MarqMetrix All-In-One analyzer.

Need technical support? We are here for you.

Country	Phone	Email
Austria	0810 282206	unity.at@thermofisher.com
Benelux	+31 76 579 51 74 (NL)	unity.bnl@thermofisher.com
	+32 9 272 55 88 (BE/LUX)	
France (Villebon)	+33 1 60 92 49 50	unity.fr@thermofisher.com
Germany (Dreieich)	+49 6103 408 1050	unity.de@thermofisher.com
Italy	+39 0295 059 537	unity.it@thermofisher.com
Nordics	+45 70 23 62 67 (DK/IS)	unity.nordic@thermofisher.com
	+46 8 556 468 20 (FI/NO/SE)	
Spain/Portugal	+34 913 806 733	unity.es@thermofisher.com
Switzerland	+41 61 716 77 40	unity.ch@thermofisher.com
UK/Ireland	0870 2411034 (UK)	unity.uk@thermofisher.com
	+353 1899 1030 (IE)	
United States/ Canada	1 800-532-4752	us.techsupport.analyze@thermofisher.com

Not listed: Contact your local service representative.

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

For research use only. Not for use in diagnostic procedures. For current certifications, visit [thermofisher.com/certifications](https://www.thermofisher.com/certifications)

© 2026 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. MCS-BR1680-EN 06/26

thermoscientific