

Sample analysis

MarqMetrix All-In-One Process Raman Analyzer

Enabling accurate, real-time results for process monitoring

System overview

The Thermo Scientific™ MarqMetrix™ All-In-One Process Raman Analyzer is a compact and portable Raman spectrometer. This all-in-one system is purpose-built for rapid deployment, ease of use, and scalability in markets where time-to-results is critical.

The MarqMetrix All-In-One Process Raman Analyzer offers:

- Analysis without sample preparation, delivering Raman spectral results in real time
- Easy setup and deployment by non-Raman spectroscopists
- Nondestructive workflows to protect precious samples
- Noninvasive handling to minimize contamination of samples
- Small footprint for convenient deployment
- Factory calibration for hardware stability and portability

With the MarqMetrix All-In-One Process Raman Analyzer, businesses can conduct real-time, nondestructive, and immediate analysis without the need for sample preparation. This analyzer makes precise and accurate measurements simple to execute and understand with its one-button hardware and easy-to-use software.

The MarqMetrix All-In-One Process Raman Analyzer is designed for out-of-the-box use, enabling you to collect highly accurate Raman measurements in less than 15 minutes. Pack this analyzer in a protective case and take it to the point of need, as its factory calibration ensures continuous and precise analysis on the go. The MarqMetrix All-In-One Process Raman Analyzer can be easily integrated into your existing process and eliminates the need for costly technical expertise.

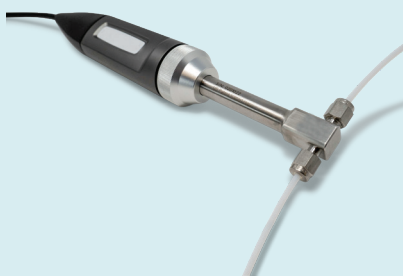
Process monitoring

With a small footprint and lower cost, the MarqMetrix All-In-One Process Raman Analyzer makes in-line process monitoring possible and enables you to make optimization decisions faster.



Flexibility to meet your needs

A comprehensive range of probes is available to seamlessly integrate your MarqMetrix All-In-One Process Raman Analyzer into almost any application.



Application versatility

Use the MarqMetrix All-In-One Process Raman Analyzer for different applications such as biopharmaceutical process analytical technology (PAT), and oil and gas production.



Software

Maximize the power of the MarqMetrix All-In-One Process Raman Analyzer with Thermo Scientific™ Lykos™ PAT Software – a remote control and monitoring software designed to simplify the complexities of chemometrics with features including:

- Real-time display, storage, and export of process monitoring results
- Remote control and monitoring of the MarqMetrix All-In-One Process Raman Analyzer from outside of the lab
- Simplified use and intuitive workflow for non-Raman spectroscopists
- Control of multiple MarqMetrix All-In-One Process Raman Analyzer from a central location

Service plans

Thermo Fisher Scientific offers several service plans designed to maximize productivity and optimize performance throughout the life cycle of your MarqMetrix All-In-One Process Raman Analyzer. Plans include exclusive service advantages such as:

- Unlimited technical support
- Depot repair services
- System compliance
- Consulting services

Speak with your sales representative to learn more about service and support options.

Service plan coverage

| Features | Premium | Essential |
|---|---------|-------------|
| Technical support | ✓ | ✓ |
| Depot repair (labor and parts) | ✓ | ✓ |
| Software updates (fixes/security patches) | ✓ | ✓ |
| Shipping (to and from depot center) | ✓ | Return only |
| Qualification services (IQ/OQ/PQ)* | ✓ | |
| User training | ✓ | |

* Installation qualification/operational qualification/performance qualification.

MarqMetrix All-In-One Process Raman Analyzer specifications

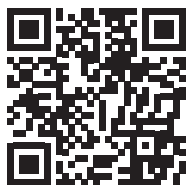
| Performance | |
|-----------------------------|---|
| Excitation wavelength | 785 nm |
| Excitation power | 100–450 mW |
| Detector | Thermally stabilized CCD (2-stage TEC) |
| Spectral range | 100–3,250 cm^{-1} |
| Resolution | 6.5 cm^{-1} average across spectral range |
| RMS dark noise | ≤ 16.5 counts at 10 sec integration |
| Physical properties | |
| Size | H: 7.7 cm W: 25 cm D: 25 cm |
| Fiber conditions | FC/PC (both excitation and collection) |
| Probe | Fiber BallProbe™ probe |
| Mounting options | Stackable |
| Operating temperature range | 15°C to 33°C |
| Operating humidity range | Noncondensing |
| Included peripherals | Wireless mouse, HDMI cable, and monitor |
| Product safety | |
| Safety features | Keyed laser interlock switch Electronic laser trigger |
| Laser certification | Class 3B laser device Reported to the FDA |
| Electrical properties | |
| Input voltage | 90–264 VAC 50–60 Hz |
| Operating voltage | 12 VDC, 2 A |
| Onboarding control system | |
| Software | MarqMetrix All-In-One Process Raman Analyzer Raman suite |
| Operating system | Integrated PC (Microsoft™ Windows™ 10 operating system) |
| Onboard storage | 1RJ-45 Ethernet port 3 USB 3.0 |
| Video output | 1 DisplayPort™ 1.1 interface (VGA, DVI, or HDMI with adapter) |

Product ordering information

| Description | Cat. No. |
|--|--------------|
| MarqMetrix All-In-One Process Raman Analyzer | |
| MarqMetrix All-In-One Process Raman Analyzer with Thermo Scientific™ MarqMetrix™ Bioreactor BallProbe™ Sampling Optic | 800-04541-01 |
| MarqMetrix All-In-One Process Raman Analyzer with Thermo Scientific™ MarqMetrix™ Process BallProbe™ Sampling Optic | 800-04551-01 |
| MarqMetrix All-In-One Process Raman Analyzer with low-pressure Thermo Scientific™ MarqMetrix™ FlowCell™ Sampling Optic | 800-04561-01 |
| MarqMetrix All-In-One Process Raman Analyzer probe accessories | |
| Interchangeable Fiber Head standalone, no BallProbe | 800-05431-01 |
| Thermo Scientific™ MarqMetrix™ Bioreactor BallProbe™ Sampling Optic probe only | 810-02851-01 |
| MarqMetrix All-In-One Process Raman Analyzer, Thermo Scientific™ MarqMetrix™ Process BallProbe™ Sampling Optic, probe only | 810-02841-01 |
| MarqMetrix All-In-One Process Raman Analyzer, low-pressure Thermo Scientific™ MarqMetrix™ FlowCell™ Sampling Optic, flow cell only | 810-02861-01 |

Service plan ordering information

| Plan description | Cat. No. |
|--|--------------|
| Premium 1-year service plan | 820-00419-01 |
| Essential 1-year service plan | 820-00420-01 |
| Remote chemometrics model building service | 820-00429-01 |
| MarqMetrix All-In-One Process Raman Analyzer on-site qualification (IQ/OQ/PQ) and training (per service event) | 820-00418-01 |
| MarqMetrix All-In-One Process Raman Analyzer virtual qualification (IQ/OQ/PQ) and training (per service event) | 820-00417-01 |



Learn more or request a demo at thermofisher.com/marqmetrixAIO

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