# **Enrich Process Understanding**

# With Real-Time, In-Situ Analysis



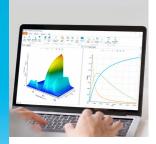
### Raman, Simplified

From data collection to analysis, ReactRaman with iC Raman brings compositional analysis to every lab. Automated parameter selection provides accurate data collection, enabling scientists to get confident results. Right first time, every time, in every process with every user.



### **Compact Performance**

Class-leading performance with excellent stability and sensitivity in a compact, stackable package. Deployment can be anywhere in the lab for batch or flow. A single robust connector provides inherent safety and ensures alignment for worry-free measurements.



## Information-Rich Experimentation

Data acquisition and analysis is quick and easy with the industry standard iC Software for reaction analysis. iC Software seamlessly incorporates multiple orthogonal data streams to link process variables that drive a comprehensive process understanding.



### **Shared Expertise**

Thousands of PAT installations around the world and four decades of experience are built into ReactRaman 802L. Our global expert support team is committed to ensuring users' success through trainings and application development, in-person or virtual, whenever needed.



## ReactRaman™ 802L

ReactRaman with iC Raman software guides users to high-quality reaction information from in-situ, real-time composition analysis. Whether monitoring polymorph transitions during crystallization, studying reaction kinetics, or investigating downstream bioprocess variables, ReactRaman provides in-depth understanding of the roles and limits of key reaction species that allow scientists to quickly make informed decisions. A high-performance spectrometer coupled with an intuitive, integrated software platform ensures reliable and high-quality reaction information from every experiment.

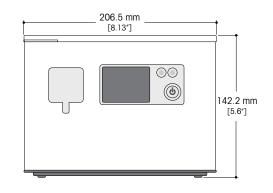


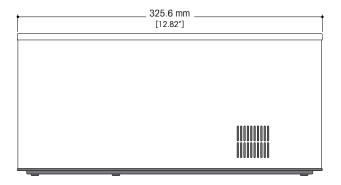
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# Technical Data: Spectrometer

Spectral Range	150 to 3400 cm <sup>-1</sup>		
Excitation Wavelength	785 nm		
Excitation Power	Maximum 400 mW at probe tip; Software selectable settings		
Detector	Deep-cooled CCD		
Probe Connection	SmartConnect™		
Operating Temperature Range	5 °C to 35 °C [40 °F to 95 °F]		
Weight	7.3 kg [16 lb]		
Laser Classification	Class 3B laser; Compliant with EN/ IEC 60825-1, 21 CFR 1040.10 and 1040.11		
Certifications	MET-C/US Standards: EN/IEC 61010-1, CSA C22.2 No. 61010-1, EN/IEC 61326, Class A digital device compliant to FCC Part 15 Rules		
Power	100 to 240 VAC, 50/60 Hz, 2.5 A		





# Technical Data: Sampling Technology

Standard Immersion Probe  Standard Immersion Probe  50 μL Flow Cell Optic  8 mm Non-Contact Optic  47 mm Non-Contact Optic  Extended Immersion Probe  Extended Immersion Probe  C-22, Sapphire, Gold Seal  Sampling Specifications  Length: 305 mm [12 in] Volume: 50 μL  Working Distance: 8 mm Working Distance: 47 mm Length: 432 mm [17 in]  Probe Diameter  9.5 mm [0.375 in]  Threads: UNF 1/4"-28  9.5 mm [0.375 in]  Temperature Range  -40 °C to 300 °C  -40 °C to 200 °C  0 °C to 100 °C  0 °C to 100 °C  -40 °C to 300 °C		Interchangeable				Fixed
ProbeOpticOpticProbeProbe Wetted MaterialsC-22, Sapphire, Gold SealC-22, Sapphire, PTFE SealSS316, SapphireSS316, SapphireC-22, Sapphire, Gold SealSampling SpecificationsLength: 305 mm [12 in]Volume: 50 μLWorking Distance: 8 mmWorking Distance: 47 mmLength: 432 mm [17 in]Probe Diameter9.5 mm [0.375 in]Threads: UNF 1/4"-289.5 mm [0.375 in]25.4 mm [1 in]9.5 mm [0.375 in]						
Materials         Gold Seal         PTFE Seal         Gold Seal         Gold Seal           Sampling Specifications         Length: 305 mm [12 in]         Volume: 50 μL         Working Distance: 8 mm         Working Distance: 47 mm         Length: 432 mm [17 in]           Probe Diameter         9.5 mm [0.375 in]         Threads: UNF 1/4″-28         9.5 mm [0.375 in]         25.4 mm [1 in]         9.5 mm [0.375 in]			50 µL Flow Cell Optic			
Specifications         9.5 mm [0.375 in]         Threads: UNF 1/4"-28         9.5 mm [0.375 in]         25.4 mm [1 in]         9.5 mm [0.375 in]				SS316, Sapphire	SS316, Sapphire	
the state of the s		Length: 305 mm [12 in]	Volume: 50 µL	Working Distance: 8 mm	Working Distance: 47 mm	Length: 432 mm [17 in]
Temperature Range         -40 °C to 300 °C         -40 °C to 200 °C         0 °C to 100 °C         0 °C to 100 °C         -40 °C to 300 °C	Probe Diameter	9.5 mm [0.375 in]	Threads: UNF 1/4"-28	9.5 mm [0.375 in]	25.4 mm [1 in]	9.5 mm [0.375 in]
	Temperature Range	-40 °C to 300 °C	-40 °C to 200 °C	0 °C to 100 °C	0 °C to 100 °C	-40 °C to 300 °C
Pressure Rating         206 bar [3000 psi]         170 bar [2500 psi]         Ambient         Ambient         206 bar [3000 psi]	Pressure Rating	206 bar [3000 psi]	170 bar [2500 psi]	Ambient	Ambient	206 bar [3000 psi]
Probe Fiber Length         1.8 m [6 ff]           1.8 m [6 ff]	Probe Fiber Length	1.8 m [6 ff]				1.8 m [6 ft]

SmartConnect™ Probe Interface with integrated laser interlock and electronic verification

Custom configurations available upon request

www.mt.com/ReactRaman

For more information

## **METTLER TOLEDO Group**

Automated Reactors and In-Situ Analysis Local contact: www.mt.com/contacts

Subject to technical changes
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