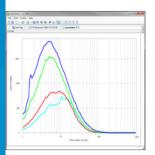
# **Inline Particle Measurement**

# Optimize Process Development



#### Track Particle Dimension, Shape and Count

ParticleTrack G400 measures a fingerprint distribution of the particle system that is sensitive to changes in dimension, shape and count. Real-time measurements track changes in particles as they naturally exist in the process eliminating the need for offline sampling.



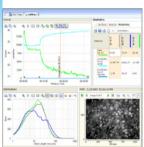
# Understand, Optimize and Control

Understand how the particle system responds to changing process parameters. Optimize the particle distribution to improve process performance and product quality. Control the particle distribution to achieve consistent endpoints, batch repeatability, and process stability.



# Versatile, Ergonomic and Lightweight

A versatile interchangeable probe design ensures fast and easy adjustment to accommodate the scale or volume required. An ergonomic probe/conduit design simplifies integration into the reactor setup. Lightweight, stackable base units are easily installed inside the fume-hood or moved to the lab bench.



#### iC FBRM™ Software

iC FBRM provides powerful data acquisition and interpretation tools that enable users to quickly and easily evaluate experimental data. Intuitive tools allow users to combine data from multiple ParticleTrack experiments with inline PVM® (Particle Vision and Measurement) images to produce professional reports with one click.



### ParticleTrack™ G400

ParticleTrack G400 with FBRM® (Focused Beam Reflectance Measurement) technology for real-time quantitative measurement tracks the rate and degree of change to particles, particle structures and droplets as they exist in process. Inline measurements enable scientists and engineers to quickly associate particle system dynamics with process conditions - ensuring product quality and efficiency in filtration and other downstream processes. The portable ParticleTrack G400 can be used for sample analysis, mounted in a laboratory vessel or inserted in a continuous pipeline for real-time monitoring.



#### **Inline Particle Measurement**

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### **Technical Data**

Detection Range	0.5 to 2000µm
Probe Wetted Alloy	C22
Probe Window	Sapphire; TM press-fit window (standard); Kalrez(R) 6375 O-rings (optional on 19mm probe only)
Conduit Length	3m [9.8ft]
Probe Tip Temp Range	-10 to 90°C (standard)*; -80 to 90°C (with purge)**
Probe Pressure Rating	3barg* (standard); up to 100barg (custom)
Total System Weight	4.5kg [10lbs] (includes probe and conduit)
Air Supply for Optional Low Flow Purge (use to avoid condensation when operating below dew point)	Max. inlet pressure to purge manifold: 4.1barg [60psig]; Max. purge manifold outlet pressure: 0.8barg [12psig]; Max. Purge Flow: 5NL/min [0.2SCFM]
Power	100-240VAC (auto-switching), 50/60Hz, 1.2A

<sup>\*</sup> Temperature and pressure specifications are conservative ratings, but should not be exceeded unless exceptions are specifically provided for a given installation design. Contact METTLER TOLEDO for information about extreme-temperature or high-pressure applications. \*\*Temperature Range (with purge) limited to -10°C to 90°C with 19mm optional O-ring window design

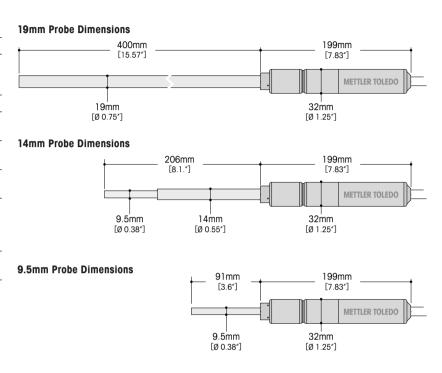
#### Certification

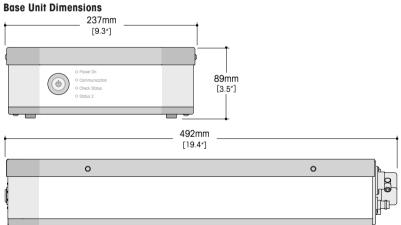
NRTL Certificate E113433; CE Approved, Class 1 Laser Device, Compliant with 21CFR1040.10 and 1040.11 and IEC60825-1





ParticleTrack G400 is not rated for explosive locations.





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## www.mt.com/ParticleTrackG400

For more information