Size and Cou

size (um

counts

www.dia-m.ru

Track Particles in Real Time Obtain Evidence for Optimization

Measure Particle Size and Count

Particle size and count directly impact performance in multiphase processes including crystallization, emulsification and flocculation. By monitoring particle size and count in real time scientists can understand, optimize and scale-up processes confidently using evidencebased methods.

Understand without Sampling

Particles can change when sampled and prepared for offline analysis. By tracking changes to size and count, as particles naturally exist in process, scientists obtain process understanding safely and with no time delay – even at extremes of temperature and pressure.

Design Processes Confidently

By monitoring particles continuously, as experimental conditions are varied, it is possible to determine the influence of process parameters on particle size and count. This unique information can be used to design processes that will consistently deliver particles with optimized attributes.

Flexibility across Scales

ParticleTrack G400 combines a portable design with interchangeable probes to allow implementation at scales ranging from 5 mL to 5 L. The impact of reactor size and configuration can be investigated with a single instrument making scale-up studies more effective.



ParticleTrack[™] G400

ParticleTrack G400 with FBRM® technology is a probe-based instrument that is inserted directly into laboratory reactors to track changing particle size and count in real time at full process concentrations. Particles, particle structures and droplets are monitored continuously, as experimental conditions vary, providing scientists with the evidence required to deliver consistent particles with the required attributes.



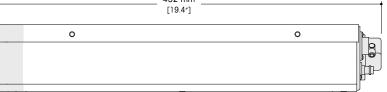
Track Particles in Real Time

Obtain Evidence for Optimization

Technical Data

Method of Measurement	Focused Beam Reflectance Measurement (FBRM)	19 mm Probe Dimensions 400 mm [15.75'] 199 mm [7.83']
Measurement Range	0.5 µm to 2000 µm	
Probe Wetted Materials	14 mm: C22; Sapphire window (TM) 19 mm: C22; Sapphire window with Kalrez® 6375 O-rings (TM optional)	19 mm 32 mm
Probe Temp Range (purge required when operating below dew point)	10 °C to 90 °C (standard); -10 °C to 90 °C (Kalrez O-rings and purge); -80 °C to 90 °C (TM window and purge)	[Ø 0.75'] [Ø 1.26'] 14 mm Probe Dimensions
Probe Pressure Range	3 barg (standard); up to 100 barg (custom)	70 mm 136 mm 199 mm [2.76"] [5.35"] [7.83"]
Probe Conduit Length	3 m [9.8 ft]	METTLER TOLEDO
Base Unit Temp Range	5 to 35 °C	
Base Unit Description	Laboratory Base Unit	9.5 mm 14 mm 32 mm [Ø 0.37 ⁴] [Ø 0.55 ⁴] [Ø 1.26 ⁴]
Purge Requirements (operating below dew point)	Pressure: 1 barg [15 psig] Flow: 1.2 NL/min (0.042 SCFM)	
Power	100-240 VAC, 50/60 Hz, 1.2A	
Certification	CE Approved, Class 1 Laser Device, Compliant with 21CFR1040.10 and 1040.11 and IEC 60825-1	Base Unit Dimensions

492 mm



Москва 000 «Диаэм» www.dia-m.ru ул. Магаданская, д. 7, к. 3 🔳 тел./факс: (495) 745-0508 🔳 sales@dia-m.ru С.-Петербург Новосибирск Воронеж Йошкар-Ола Красноярск

+7 (812) 372-6040 spb@dia-m.ru

Казань +7(843) 210-2080 kazan@dia-m.ru

+7(383) 328-0048 nsk@dia-m.ru

Ростов-на-Дону +7 (863) 303-5500 rnd@dia-m.ru

+7 (473) 232-4412 vrn@dia-m.ru

Екатеринбург +7 (912) 658-7606 ekb@dia-m.ru

+7 (927) 880-3676 nba@dia-m.ru

Кемерово

+7 (923) 158-6753 kemerovo@dia-m.ruu +7(923) 303-0152 krsk@dia-m.ru

Армения +7 (094) 01-0173 armenia@dia-m.ru

