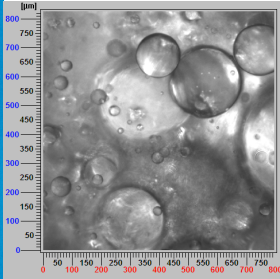
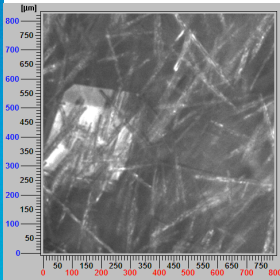


Inline Particle Microscope Visualize, Understand, and Optimize



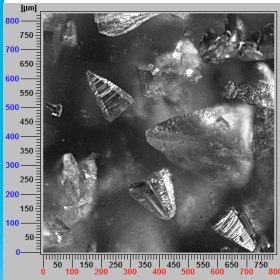
Visualize and Understand Particles, Droplets and Cells

By capturing thousands of images per experiment without the need for sampling, PVM® helps to immediately visualize changes to particles, droplets, or cells and gain early insight into process challenges.



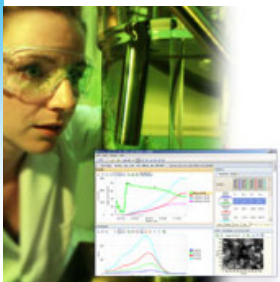
Identify and Troubleshoot Process Changes or Upsets

PVM® images quickly identify changes in fines, oil formation, shape/morphology, or agglomeration. This enables users to screen experimental parameters, gain early determination of process scalability and ensure product quality.



High Resolution Images

PVM® provides microscope quality images, in-process and in real time to characterize particle systems from 2µm to 1mm and in concentrations up to 50% solids and higher.



Synchronize and Quantify

iC FBRM™ software allows PVM® images to be synchronized and quantified with FBRM® (Focused Beam Reflectance Measurement) data to rapidly measure and understand particle shape, dimension, and count.

*separate FBRM® and iC FBRM™ software available



PVM® V819 Technology

Particle Vision Microscope (PVM®) is a probe-based vision tool that provides immediate, critical insight into crystal, particle, and droplet systems. PVM® enables chemists and engineers to instantly detect and understand process changes and gain confidence in optimized process efficiency that could otherwise take months using traditional techniques.

Technical Data

Inline Particle Microscope

Visualize, Understand, and Optimize

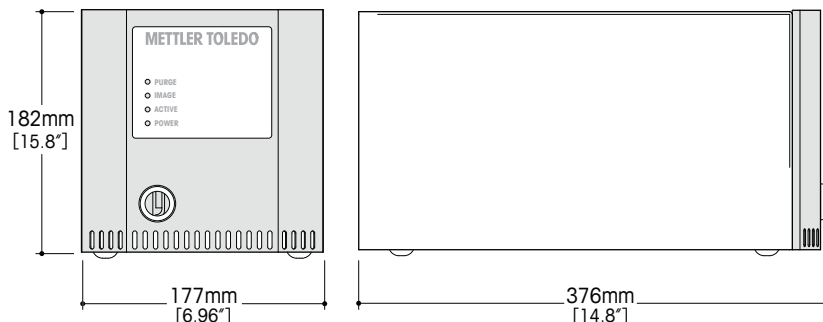
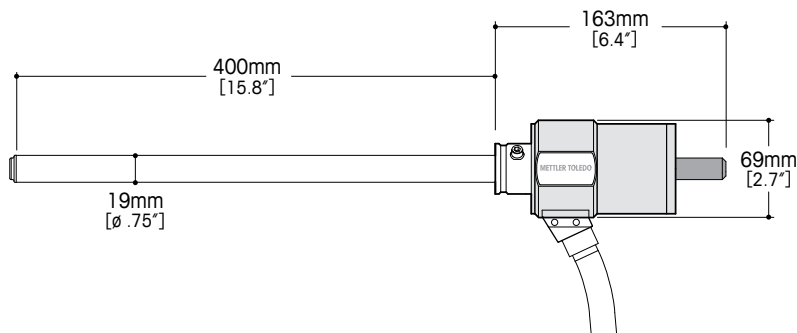
METTLER TOLEDO FBRM® (Focused Beam Reflection Measurement) is the world leader in Process Analytical Technology (PAT) for inline particle characterization across the pharmaceutical and chemical industries.

Model	V819
Probe Tip Material	Alloy-C22 Wetted
Probe Window	Sapphire
Probe Diameter	19mm
Probe Length	400mm
Field of View	1075µm x 825µm
Resolution	2µm
Temperature Range	-80° to 120°C
Pressure	Vacuum to 10 bar
Conduit Length	5m
Certification	CE, Class 1 M Laser
Controller and Software	Laptop or Desktop Connections

This product is covered by one or more of the following patents*:

- USA: 4871251, 5815264, 5619043, 6449042, 6940064
- EU: 0289200 B2
- JAP: 2837410, 3207861
- FIN: 882008A
- AU: 609394, 724733
- CA: 1322110, 2285189

*Other patents pending

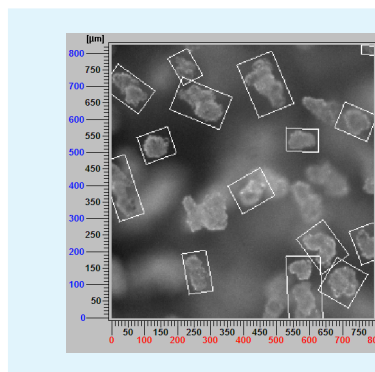


Probe Specifications

- Tip Diameter: 19mm
- Probe Length: 400mm
- Housing Diameter: 69mm
- Overall Length: 563mm

Field Unit Specifications

- 177w x 376d x 182h (mm)



Real-Time Image Analysis

Real-time image analysis software is used to quantify particle dimension or aspect ratio thus providing quantitative information to speed development time and gain process confidence.

www.mt.com/particle



Internet: <http://www.mt.com/autochem>
Worldwide service



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For more information