Experiment Setup and Data Acquisition in iC FBRM[™]

B

Use this Quick Reference after iC FBRM software has been installed, all hardware connections have been established, the instrument has been configured, and the instrument calibration has been validated.

I. Prerequisites

- Verify the ParticleTrack probe is in position and oriented correctly. (See Quick Reference: "Positioning the ParticleTrack and ParticleView Probe" MK-PB-0050-AC.)
- Allow 30 minutes for the instrument to warm up before taking critical measurements.

II. Experiment Setup





- 2. In the Experiment Name window (B), type the file name for your experiment. Then, choose the folder where the experiment will be saved or accept the default.
 - Recommendation: Save experiments to a local rather than a network drive.
 - Optional: Select a file to use as a template for the new experiment.

Start a new experim	ent or append to a previous experin	ient.	
Start with a new file Experiment File Experiment Name: Experiment \$(Date) \$(Tii older: C:\iC_FBRM_Experimen Template:	Append to an existing file the	•	You can copy the settings from a previous experiment by selecting a previous experiment in the Template field
FBRM: ProbeA Type: Chord Selection Model: Chord Selection Model: Scan speed: URL: Calibration Validated: Serial Number:	ParticleTrack G600/G600 Ex Primary V. 1.1.11 Macro V. 1.1.11 2 top://localhost.63000/ 03-Dec-2015 12345	Configure Instrument	

3. Click Next

4. In the Create Experiment Schedule window, use the drop-down menus (C) to select the experiment duration and the sampling intervals that are suitable for your process.

2 hours 4 hours 8 hours	45 seconds 10 seconds 2 seconds 3 seconds 5 seconds 10 seconds	160 1440 480		Adding phases to an experiment allows users minimize the experiment size while capturing the n
8 hours	2 seconds 3 seconds 10 seconds 10 seconds	480		experiment allows users minimize the experiment size while capturing the n
	2 seconds 3 seconds 5 seconds 10 seconds			minimize the experiment
	3 seconds 5 seconds 10 seconds			size while capturing the n
	5 seconds 10 seconds			ouptaining and in
	10 seconds			relevant process informa
				Use a short sampling inte
	15 seconds			for periods of the experim
	30 seconds			where particles are changed
	45 seconds			rapidly.
	1 minute			Use a long sampling inte
	2 minutes			when particles are chang
	3 minutes			slowly.
	5 minutes			
	10 minutes			
	15 minutes			
		45 seconds 1 mmutes 2 minutes 3 minutes 10 minutes 15 minutes	45 seconds 1 mmutes 2 mmutes 3 mmutes 5 mmutes 10 mmutes 15 mmutes	45 seconds 1 minutes 2 minutes 3 minutes 10 minutes 15 minutes

Adding phases to an experiment allows users to minimize the experiment file size while capturing the most relevant process information.

- Use a short sampling interval, for periods of the experiment where particles are changing rapidly.
- Use a long sampling interval when particles are changing slowly.

- 5. Click Next to verify probe cleanliness (D)
 - The total number of counts should be less than 300—in the green region—when the probe is immersed in clean deionized water or pure solvent.
 - If the counts are too high—in the red region—clean the probe window using deionized water or pure solvent and a paper tissue.



6. Click Finish to initiate experiment.

III. Data Acquisition

1. The experiment begins in pause mode. New experiments are initially paused to allow you to perform last-minute adjustments.

The background color of the Live Experiment Toolbar (E) indicates experiment status: Green = Running, Yellow = Paused, Red = Alarm condition, Blue = Stopped

- 2. When ready, click the Start experiment button in the Live Experiment Toolbar to run the experiment and start saving data. Discard previous data collected during experiment setup, as preferred.
- **3.** At any time during the experiment, you can:
 - Type process-related notes in the Annotation text box (F) on the Live Experiment Toolbar.
 - Click the Edit Statistics icon B (G) to edit definitions in the Statistics Viewer.
 - Update Averaging, Channel Grouping, and Display Settings in the Data Treatments task pane (H).
 - Click the Current interval icon (1) to add, delete, or edit the experiment schedule.
 - Click the Clean Window (J) button to open a window that shows an optimized view for verifying probe cleanliness.

4. If iC PVM 7.0 SP1 or later software is running on the same PC as iC FBRM, live images can be exported from iC PVM and imported to view in iC FBRM.



NOTES:

- Refer to the iC FBRM video tutorials, online Help, or software user guide for more about iC FBRM.
- Review the Quick Reference sheet on "Data Review and Analysis with iC FBRM" for an introduction to experiment analysis features.

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