

DPA4100 PRODUCT BULLETIN



The DPA4100 uses Micro-Flow Imaging (MFI™) to analyze particles suspended in liquids. The instrument operates by automatically capturing images of particles flowing through a Flow Cell. These images are then analyzed, and a database is produced consisting of particle count, size, shape and intensity. The database can be digitally interrogated to create parameter distributions, scatterplots and isolate particle sub-populations of interest. The sample volume in each frame is precisely controlled so particle concentrations are determined absolutely. No calibration by the user is required. MFI has been shown to have superior sensitivity regardless of a particle's material, shape and optical properties.

THE DPA4100 FEATURES AN OPEN ARCHITECTURE DESIGN PROVIDING THE ULTIMATE FLEXIBILITY AND CONFIGURABILITY FOR ANALYTICAL LABORATORIES.

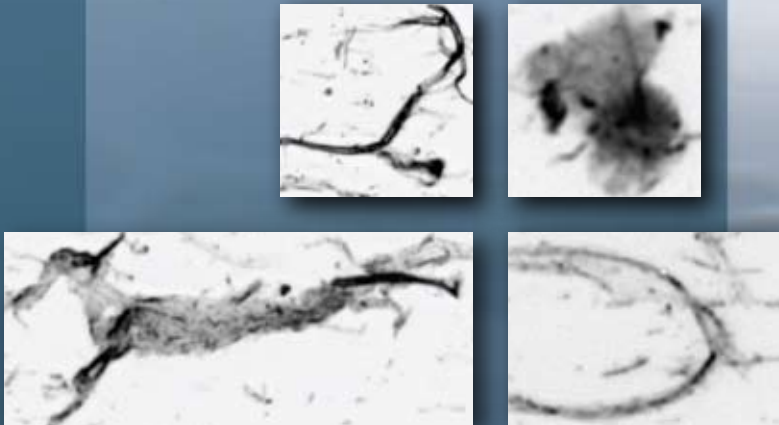
THE DPA4100 CAN:

- ▶ accurately measure low concentrations of particulate contaminants
- ▶ measure size, shape and intensity of suspended particles
- ▶ use software filters on the particle morphology database to identify sub-populations

DPA4100 instruments are used in the pharmaceutical, environmental and material science industries.

THE INSTRUMENT FEATURES:

- ▶ two magnification set-points to suit the desired size range and image quality
- ▶ automatic optimization of illumination and thresholds to maximize sensitivity and consistency
- ▶ wide range of sample volumes and introduction methods
- ▶ complete suite of software controls for sample analysis and data management/analysis



DPA4100 Specifications

PARAMETER	DESCRIPTION
SIZE RANGE	0.75 TO 400µm
MAXIMUM CONCENTRATION	800,000 PARTICLES PER ML @ 2.5µm
MINIMUM CONCENTRATION	<5 PARTICLES PER ML
FOCUS DEPTH	400µm
FIELD-OF-VIEW	1,760 x1,400µm
ANALYSIS RATE	200µL PER MINUTE
MAXIMUM LINEAR VELOCITY	6 MM PER SECOND
PUMP CONFIGURATION	MANUAL OR AUTOMATIC
MINIMUM VOLUME	500µL
SAMPLE INTRODUCTION	MULTIPLE CONFIGURATIONS FOR DISCRETE SAMPLES AND SEMI-CONTINUOUS OPERATION
MAXIMUM RUN DURATION	25 HOURS
IMAGE FORMAT	TIFF OR BMP
IMAGE TYPE	BINARY OR GRAYSCALE
PIXEL BIT DEPTH	10 BIT
PIXEL DENSITY	1.3 MEGAPIXELS
MORPHOLOGICAL PARAMETERS	<ul style="list-style-type: none"> • SIZE (EQUIVALENT CIRCULAR DIAMETER OR ECD) • AREA • PERIMETER • ASPECT RATIO • FIBER LENGTH (MAXIMUM FERET'S DIAMETER) • CIRCULARITY • TRANSPARENCY • OTHER PARAMETERS AVAILABLE ON REQUEST
SOFTWARE FEATURES	<ul style="list-style-type: none"> • REAL-TIME DISPLAY OF SUSPENDED PARTICLES • HISTOGRAMS, TREND CHARTS AND SCATTERPLOTS • AUTOMATIC AND CUSTOM REPORT GENERATION • IMAGE LABELING, CROPPING AND STORAGE • MORPHOLOGICAL PARAMETER FILTERING, SUB-POPULATION ISOLATION • VARIETY OF DATA AND IMAGE FORMATS FOR EXPORTING AND ARCHIVAL
21 CFR PART 11 COMPLIANCE	AVAILABLE OPTION
SAFETY CERTIFICATION	UL/IEC/EN/CSA 61010-1 2 ND EDITION FCC 47 PART 15 (CLASS A)
EMC CERTIFICATION	ICES-003 (CLASS A) EN61326 (INCLUDING A1, A2 AND A3) IEC61326:2005

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. VALUES SHOWN ARE TYPICAL. ACTUAL RESULTS WILL DEPEND ON SAMPLE TYPE AND OPERATING CONDITIONS.

ON-SITE DEMONSTRATIONS AND TRIALS ARE AVAILABLE.
PLEASE VISIT OUR WEBSITE AT WWW.BRIGHTWELLTECH.COM OR CONTACT US AT 1.866.333.8772