SONY SH800 SORTING CHIP PARAMETERS & SELECTION GUIDE

Applicable to the following nozzle series: LE-C3107 (70um), LE-C3210 (100um), LE-C3113 (130um)

NOZZLE SIZE

LE-C3107
70 um

LE-C3210
100 um

LE-C3113
130 um

DROP VOLUME

1.5 nL

3.5 nL

6.9 nL

NOZZLE SPEED (EMPTY DROPS / SECOND)

Standard Mode
~50K drops/sec

Targeted Mode
~30K drops/sec

~22K drops/sec

~12K drops/sec

SORT SPEED (TOTAL EVENTS / SECOND)

10-12K eps

6K eps

< 4K eps

2.5K eps

Aim for < 1 cell every 5 empty drops for lowest chance of coincidence aborts

PARTICLE SIZE
(Nozzle size must be ~5-7x larger than particle)

< 10 um

< 18 um

< 25 um

NOZZLE APPLICATION

* Fastest
* Limited to small particles
* Runs at highest pressure

* Most typical cell types can be sorted with 100um nozzle
* Targeted Mode is for large cells with uneven geometry & for improved plate targeting

* Slowest
* Lowest pressure = best cell viability
* Sorts any size particles < 25um

SH800 Software autocalibrates optimal Clock & Drive settings for each individual chip

PRESSURE

40 psi

20 psi

9 psi

FREQUENCY (CLOCK)

~50 kHz

~30 kHz

~22 kHz

~12 kHz

AMPLITUDE (DRIVE)

30-50%

14%

30%

~ 30%

SATELLITE MERGE

Fast

Regular

Fast

Regular

STREAM EXAMPLES

Satellite drop

Break-off drop

1730 North First Street, San Jose, California 95112 | www.sonybiotechnology.com