

Automation for FISH and Cytogenetics Laboratories

The dropping process has been a highly manual technique for years, leaving an automation void between imaging systems and harvesters. CellWriter completes the continuum by automating the dropping process to deliver consistent, quality spread interphase and metaphase nuclei for analysis.

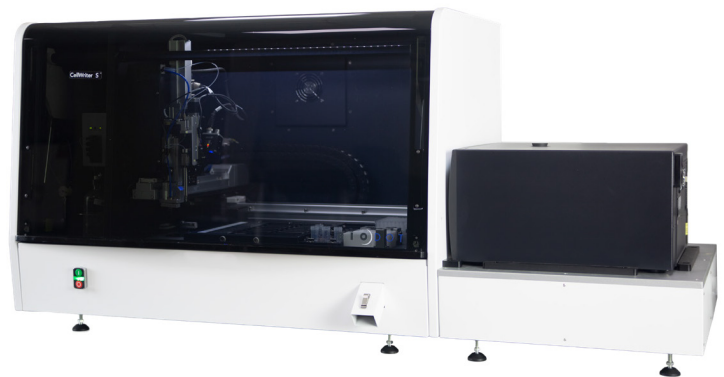
The CellWriter S is a robotic workstation that produces slides for both Karyotyping and FISH. By integrating BioDot's nanoliter dispenser (BioJet™) with precise temperature and humidity control, we have developed an efficient system that produces quality slides.

BioDot further simplifies the workflow by introducing a new, patented slide technology. FISHArray Slides™ enable multiplexed FISH assays and eliminate the need for rubber cement when preparing for hybridization (a messy and time consuming step).

The CellWriter S processes 24 slides per batch directly from up to 24 samples.

Features/Benefits

- Improve Metaphase Spread Quality
- Perform Up to 8 Probe On One Slide
- Reduce Probe/Reagent Cost
- 24 Slide Processing Capability
- 24 Sample Tube Capacity
- Real-time Probe Inventory Management (PIMS)
- Automated
- Normalization
- Cell Dropping
- Pretreatment
- Probe/DAPI Dispensing
- Denature/Hybridization
- Coverslipping & Sealing



Results



Image 1 & 2: Metaphase spreads from peripheral blood and bone marrow samples prepared with CellWriter S2 CytoPrinting technology.

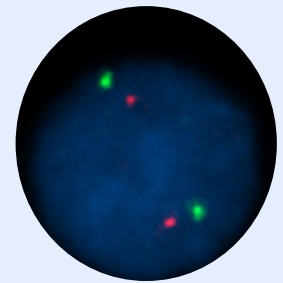
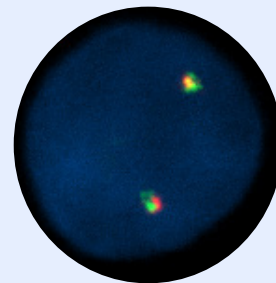


Image 3 & 4: Interphase nuclei labeled with IGH Breakapart and D13S319 FISH probes. Cells counterstained with DAPI plus Vectashield. Images taken with the Zeiss Axio imager. M1 using the 20x objective.

Performance

Dispense Volume Dynamic Range

- 100nl to 10µl

Dispense Volume Precision

- ± 5% CV

Humidity Control

- Ambient to 70% RH ± 5%

Slide Temperature

- 4°C to 65°C +/- 1°C

Fume Filtering

- Specialty-blended Filter Media
[i.e. Acid Gas, Mercury, Aldehyde, Ammonia]

Configuration

Dispense Channels per System (Sample/Probe)

- 1

Slides per Run

- Up to 24

Samples per Run

- Up to 24

Probes per Run

- Up to 48

Barcode Scanning

- Linear (All Standard Formats)
- 2D (Data Matrix, QR)
- Stacked (PDF417, GS1 Databar)

Specifications

Dimensions (L x D x H)

- 98 cm x 56 cm x 87 cm (39 in. x 22 in. x 34 in.)
w/ Normalization Option
- 155 cm x 56 cm x 87 cm (61 in. x 22 in. x 34 in.)

Power Requirement

- 110/220 VAC; 50/60 Hz
- Weight
- 90 kg (200 lbs.)

FISHArray Technology

Don't simply automate the workflow. Improve it.

BioDot introduces the FISHArray™ technology, enabling labs to perform as many as 8 different FISH assays on a single slide. This new approach leads to fewer washes, fewer hybridizations, and fewer slides to analyze.

Patent No. US 7754439 & US 8323882



For More Information
About CellWriter,
Scan This QR Code