

# SMARTTYPE

## HIGH RESOLUTION BRIGHTFIELD & FLUORESCENCE KARYOTYPING



### OVERVIEW

The SmartType workstation is a robust, simple-to-use karyotyping system complete with everything needed to start karyotyping immediately. A SmartType Workstation comprises a computer, a high-resolution digital camera and the unique SmartType software.

### FEATURE LIST

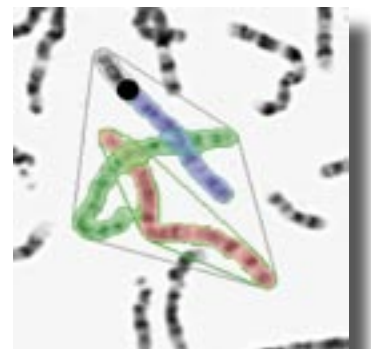
- Simple To Use Interface
- High Resolution Digital Camera
- Compatible with any Laboratory Microscope
- Networkable
- Integrated Patient Data Recording
- FISH & M-FISH Options
- G, R, Q & Dapi-band Classifiers
- Trainable Classifiers
- Simple Annotation Tools
- Fast Onscreen Focussing
- Multi Step Undo
- Flexible Report Printing
- Quips™ and MacKType™ Support
- Smart Editing Tools
- Database Integration
- Mac and PC versions

### SMART TOOLS

Smart tools automatically separate touching and overlapping chromosomes.

For difficult to separate overlaps and clusters, manual editing tools have been ergonomically designed to get the job done with a minimum of fuss. Colourful highlighting is used to keep the user informed of his exact stage in the editing process.

Novice or expert, it's reassuring to know that SmartType allows you multiple undo steps. Even after saving, the karyotype can always be re-opened for editing.



**Resolve Overlap by Painting**

### CLASSIFICATION

SmartType comes with classifiers for the standard banding patterns but in addition to this, SmartType's trainable classifier can learn from your samples to produce a more effective automatic classifier.

## COMPOSITE KARYOTYPES

Comparing karyotypes from the same or different cases is made easy with a Composite Karyotype feature that displays any number of karyotypes in table form.

## DATA INTEGRITY

Unlike some other karyotyping systems SmartType images are captured using a high quality, high-resolution digital camera. The captured images can be digitally enhanced but the initial captured data is retained so you can always go back to the original image.

SmartType gives both high-resolution and an exceptionally large field of view, removing the need to stitch together multiple images to capture large metaphases. A stage position recorder can be added to automatically record the exact slide co-ordinates for each metaphase.

The high speed of the Firewire camera means that focussing and positioning can be carried out comfortably on-screen. The high-resolution camera is matched by a high-resolution wide screen display so you have enough room for a full size karyotype and metaphase side-by-side. A touch sensitive screen option is available for the ultimate in ease of use.

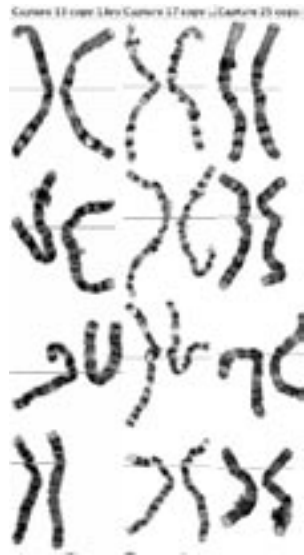
## CASE MANAGEMENT

SmartType is structured to fit in with standard laboratory procedures. A SmartType case is used to organise all the karyotypes belonging to a laboratory case. Captured images and karyotypes are automatically filed together in a case folder. A pictorial overview of the case shows a gallery of the metaphase and karyotype images. You can customise SmartType with a user-defined set of details to be stored with the case and/or each karyotype.



**Case Management Gallery View**

Files from other third party applications can be co-located within the case folder to keep workflow organised.



**Composite Karyotype**

## DATABASE & NETWORKING

SmartType can be integrated with a variety of database applications and workflow management systems. SmartType supports JDBC for easy database integration.

Multiple SmartType workstations can be networked together. SmartType is compatible with Apple, NFS, Novell, and SMB file and print servers. A sophisticated security system can be used to restrict access to clinical data.

## REPORT PRINTING

Printed reports can be laid out and configured with any of the information associated with the karyotype e.g. patient details, fonts, text size and the layout are under user control. SmartType can print on paper or print to a portable document file (pdf). A pdf file can be emailed and the recipient will see the report exactly as you intended. SmartType can even fax the report.

## COMPATIBILITY

On a SmartType workstation, Quips™ and MacKType™ users have full access to existing their existing karyotype files, both for review and editing. A SmartType workstation is the only platform to offer this compatibility.

Integration between SmartCapture and SmartType applications means that FISH & M-FISH images captured in SmartCapture are transferred to the SmartType karyotyper with a single click of a button.

SmartType is unique in that it runs both on Apple Mac and PC Windows computers. By importing TIFF images, SmartType can be easily integrated with most existing capture systems.

SmartType is available as a full version, with integrated capture capability and as a satellite version, without integrated capture.

## SPECIFICATIONS

- Apple iMac 20 " 1.4 Ghz, 512MB Ram 80GB disk, CD/DVD read/write
- 1.3 Megapixel integrating firewire camera
- SmartType software
- Apple OS-X 10.3 (or higher)

## OPTIONS

- Apple Mac G5 1.6 to 2.0 Ghz, 512 MB Ram
- Apple 20" or 23 " cinema flat screen display
- Touch sensitive Apple 20" or 23 " flat display
- Automate Backup & Archival AIT-II Tape Drive

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