MDS Analytical Technologies

Sole Source Specification for Axon GenePix® 4000B

From the industry-leader in performance, the Axon GenePix® 4000B scanner from MDS Analytical Technologies is the only scanner available today that provides:

Features

- High Speed Simultaneous Dual-Channel Scanning: Scan two wavelengths in a single pass; Simultaneous scanning eliminates the need for post-capture image registration, avoids pixel shifting; Increases acquisition speed - 5 minute scan for two wavelengths at 10µm resolution (full scan area of 22 x 71.5mm); Reduces photobleaching
- Non-Confocal Technology: Provides 64µm depth of field; Expanded focal range is ideal for thick specimens, alternate substrates, and non-planar slide irregularities
- Sensitivity of 0.1 fluor/µm2: Allows detection of weak signals, while maintaining a superior signal to noise ratio; Dynamic range of 4 orders of magnitude
- Selectable Scan Resolution: User can choose from 5 to 100µm resolution, to optimize image quality and file size for each application
- Dynamic Laser Power Monitoring: Feedback circuit produces constant signal output throughout each scan
- Adjustable Focus: Facilitates scanning of a variety of substrate types
- Adjustable Laser Power: Allows user to optimize signal output for a variety of sample types
- Dynamic Photomultiplier Adjustment: Allows user to optimize detector voltages dynamically during image acquisition; MDS AT's PMTs use integrators, ensuring highest collection efficiency
- Integrated Barcode Reading: Automatically records slide ID into image file
- Small Footprint: 13.5" x 8.75" x 17.5" unit occupies minimal lab space
- One License of GenePix Pro with Each Scanner Order: Provides integrated complete software solution for microarray data acquisition and analysis
- Feature Viewer Provides Real-Time Results: Navigates through data while acquiring an image
- Integrated Software and Hardware: Ensures Seamless Communication and Superior Performance; Software monitors hardware (lasers and moving components) for system integrity, and provides a report on system performance
- 16-bit TIFF Format Output (with other user-selectable formats): Images can easily be exported to, or imported from third-party programs
- Simple SCSI Connection to PC Computer: Plug and Play device

Specifications

- Sample type: Standard microscope slides (1" × 3", 25 × 75 mm, 26 × 76 mm)
- Maximum scan area: 22 × 71.5 mm
- Excitation: 532 nm and 635 nm solid-state lasers
- Scan time: 5 minutes for both channels, full scan area, 10 µm resolution
- Pixel resolution: Adjustable from 5 to 100 µm
- Digital resolution: 16-bit
- Dynamic range: Four orders of magnitude
- Detection limit: 0.1 fluor/µm2 (Cy3 and Cy5) at S/N = 3
- Maximum S:N (PMT): 10,000:1
- Images: Single- or multi-image TIFF
- Interface: SCSI (adapter included)
- Power supply: 110 / 220V Universal power supply
- Dimensions: (34.3 × 22.2 × 44.4 cm); 35 lbs (15.9 kg)