

## Microarray analysis

# GeneTitan MC Fast Scan Instrument

## Expand your reach and optimize without compromise

Bring fast, automated, sample-to-report Applied Biosystems™ Axiom™ microarray research testing to your lab with the Applied Biosystems™ GeneTitan™ MC Fast Scan Instrument

The GeneTitan MC Fast Scan Instrument is a fully integrated solution for automated microarray research genotyping—now with enhanced scanning speed and throughput.

Experience the power of streamlined array processing for discovery, exploration, and screening research. The new GeneTitan MC Fast Scan Instrument seamlessly integrates hybridization, washing, and faster imaging into a single solution for automated array processing. Experience even greater efficiency by pairing the Applied Biosystems™ Axiom™ Propel workflow with your GeneTitan MC Fast Scan Instrument:



Reduce turnaround time by up to 2 hours



Increase sample processing volume by up to 50%

### Fully integrated for hands-free array processing

The GeneTitan MC Fast Scan Instrument enables high throughput and helps increase laboratory productivity per technician by minimizing user intervention and allowing for unattended, overnight processing of large numbers of samples in parallel. This unique degree of hands-free automation means that your data will be consistently reproducible, your lab can be more productive, and you can spend less time acquiring and managing data, giving you more time for science. By combining a hybridization oven, fluidics processing, and a state-of-the-art imaging device, the GeneTitan MC Fast Scan Instrument transforms your research lab.



### Advanced fluidics

Arrays are washed and stained by the fluidics system. Clean dry air (CDA), which is free from moisture, oils, particles, and other contaminants, is used to transport wash buffers between the reagent bottles and array plates. This utilization of CDA helps reduce the number of moving components needed, resulting in a robust instrument that is both easy and cost-effective to maintain. Finally, the plate gripper automatically transfers the arrays to the imaging device.

### Key benefits

- **Fast**—condenses hands-on processing time to as little as 30 minutes, images an array in less than 3 minutes, and operates unattended overnight
- **Scalable**—meets both medium- and high-throughput needs, enables fast time-to-data, and requires minimal manual intervention
- **Flexible**—supports genotyping studies on multiple array plate formats
- **Accurate**—enables high-quality, consistent data by processing multiple samples under identical conditions
- **Adaptable**—creates flexible workflows and sample registration via Applied Biosystems™ GeneChip™ Command Console™ Software

Contact us to learn more about discounts and trade-in offers available to you at [thermofisher.com/genetitan](https://www.thermofisher.com/genetitan)

## Specifications

GeneTitan MC Fast Scan Instrument	
Supported applications	Human genotyping, reproductive health, agrigenomics, pharmacogenomics
Weight	325 lb (147.4 kg)
Instrument dimensions	W x H x D: 55 x 33 x 26 in. (140 x 84 x 66 cm)
	External xenon arc lamp system (W x H x D): 10.5 x 9.5 x 10.0 in. (26.7 x 24.1 x 25.4 cm) External shutter controller (W x H x D): 2.9 x 0.7 x 3.9 in. (7.3 x 1.7 x 9.9 cm)
Illumination	200–700 nm output range, 300 W external xenon lamp, warranted for 500 hr
Imaging optics	Dual-excitation and emission filters with ability to expand to four filters Excitation filter: 532 nm ± 20 nm; 609 nm ± 20 nm Emission filter: 593 nm ± 20 nm; 676 nm ± 20 nm
Pixelation	0.667 μm
Current	6.2–2.6 A
Pneumatics	Oil-free, clean, dry, regulated air supply with an air flow rate of 34 L/min (1.2 CFM) at 70 PSI to operate the fluidics station
Array plate processing	
Throughput	2–3* array plates per day
Hybridization oven temperature	37.0°C–70.0°C in 0.1°C increments; temperature uniformity of ±1°C from set point temperature
Wash B temperature	Ambient room temperature to 60.0°C in 0.1°C increments with ±1°C accuracy
Imaging time	Less than 3 minutes per array
Work environment	
Clearance	12 in. (30 cm) in rear and on left side
Temperature	5°C–23.9°C (41°F–75°F)
Humidity	Maximum: 80% relative humidity for temperatures up to 75.2°F (24°C) Minimum: 30 ± 7% relative humidity
Pollution degree	2 environment
Altitude	<2,000 m
Warranty	One year parts and labor
Electrical supply	Provide voltage, frequency, or power rating per unit label; circuit breaker
Main supply voltage fluctuations	Not to exceed ±10% of the nominal supply voltage
Site preparation	Refer to site prep guide for additional information on operating requirements

\* When paired with the Axiom Propel workflow.

## Ordering information

Description	Cat. No.
<b>GeneTitan MC Fast Scan Instrument, North America/Japan (110 V) includes:</b> <ul style="list-style-type: none"> <li>Complete GeneTitan MC Fast Scan Instrument with integrated hybridization oven, fluidics processing, and imaging device</li> <li>Computer workstation with monitor</li> <li>External barcode reader</li> <li>Uninterruptible power supply for 110 V</li> <li>GeneChip Command Console Software (for automatic generation of CEL files for downstream genotyping analysis)</li> </ul>	00-0372
<b>GeneTitan MC Fast Scan Instrument, International (220 V) includes:</b> <ul style="list-style-type: none"> <li>Complete GeneTitan MC Fast Scan Instrument with integrated hybridization oven, fluidics processing, and imaging device</li> <li>Computer workstation with monitor</li> <li>External barcode reader</li> <li>Uninterruptible power supply for 220 V</li> <li>GeneChip Command Console Software (for automatic generation of CEL files for downstream genotyping analysis)</li> </ul>	00-0373

Learn more at [thermofisher.com/microarray](https://thermofisher.com/microarray)

applied biosystems