

In pharma, drug discovery and diagnostics, the ability to run large numbers of parallel experiments is important – to have that data accurate and repeatable is essential. The **ImageWoRx** multi-format reader is a high-resolution microtiter plate and slide imaging system. Optimized detection optics, white light illumination and a linear CCD create a system that provides the highest quality images available along with enhanced accuracy and repeatability. With features including fast image acquisition, imaging up to 4 fluorescent colors per well, single slide adapter, integrated autofocus and a high signal-to-noise ratio, **ImageWoRx delivers!**

Laboratory Automation

ImageWoRx can easily be integrated into a streamlined lab automation system. With robot-ready capabilities and an integrated hardware/software design, imaging microtiter plates becomes a simple, automated process. Intuitive controls allow you to quickly set up a single plate scan or a complete series of scans and have all your data stored for later analysis and review.

Quantitative, High-Resolution Data

Based on Applied Precision's proprietary imaging platform, you can be assured of high-quality, reproducible data.

- Two imaging configurations are available:
 - 20x objective with max resolution of 0.37 microns
 - 10x objective with max resolution of 0.74 microns
- High signal-to-noise ratio image acquisition hardware that has been fully integrated and tuned to maximize sensitivity
- A low noise, high quantum efficiency CCD camera produces image results across a large, linear dynamic range
- Applied Precision's proprietary on-the-fly deconvolution software is available as a standard feature to enhance resolution and contrast



Image Acquisition

- Fast acquisition time of ~ 5 minutes for a 96-well plate at full resolution (with autofocus and two fluorescence channels per well)
- Wavelength flexibility from UV (EX 350 nm) to near-IR (EM 750 nm)
- Rapid filter switching for up to 4 filter sets
- Available camera binning modes of 1 x 1 up to 6 x 6 that provide for scaleable resolutions
- Large field-of-view: 0.74mm x 0.74mm (20x)
1.48mm x 1.48mm (10x)
- Fast, image-based autofocus

Scanner Module

- User selectable scan region up to 4.25" x 2.875" (108 mm x 73 mm)
- Max. pixel resolution: 0.37 micron (20x) or 0.74 micron (10x)
- Dynamic range > 3 orders of magnitude
- Signal-to-Noise ratio > 3200:1 (well depth / read noise)

Wavelength Capability

- Cy3/Cy5 and Alexa™ 350/Alexa 488 (standard)
- Supports alternate fluorescent dyes; channel dependent
- Excitation: 350 - 700 nm
- Emission: 400 - 750 nm
- White light source

Detector

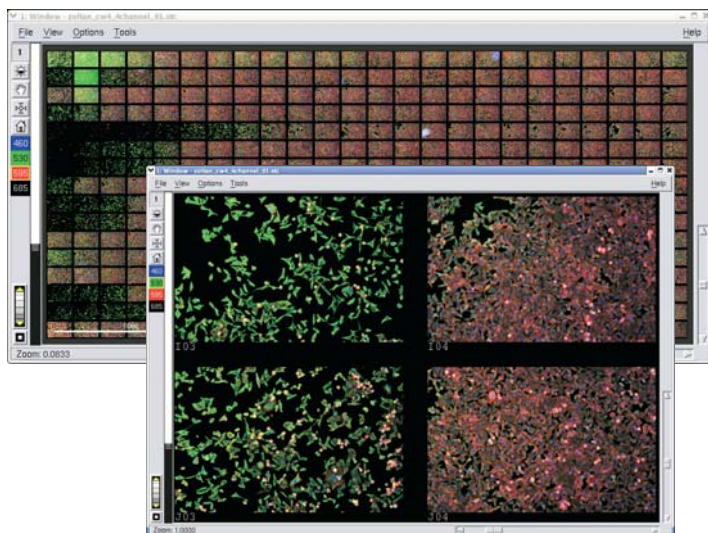
- 12-bit cooled CCD
- High quantum efficiency, low noise
- Peak QE = 55% (@ 650 nm)
- Large dynamic range

Plate Handling

- 20x system required black-wall microplates:
 - Aurora Biotechnologies 384-well microplate (#32411); or
 - Corning Costar 384-well microplate (#07-200-655)
- 10x system recommended black-wall microplate:
 - Corning Costar 96-well microplate (#07-200-588)
- Robot compatible

Image Output

- Single-channel grayscale 16-bit TIFF
- Multi-channel proprietary format (up to 64-bits with 4 channels, 16-bits per channel)



Additional Features

- One-year warranty: parts & labor
- Installation and on-site training
- User manual

Connectivity

- Image file transfer via ethernet

Operating Environment

- Ambient Temperature: 65° - 77° F (18° - 25° C)
- Relative Humidity: less than or equal to 60%

Power Requirements

- System Power: 90 to 250 Volts, 50 - 60 Hz with auto switching power supply
- Power Consumption: less than 900W

Scanner Size and Weight

	English (inches/lbs)	Metric (cm/kg)
Scanner	16 W x 23 H x 24 D 100 lbs	40.6 W x 58.4 H x 61 D 45.4 kg

Regulatory Certification

- CE Certification

System Configurations

Standard System	
PC	Intel® Pentium® 4 processor or better Windows operating system 2 GB SDRAM Memory 80 GB system hard disk / 500 GB data storage Read/Write CD-RW / DVD-R Gigabit ethernet Dimensions: 6" W x 14" H x 16" D (15 cm W x 35 cm H x 40 cm D) Weight: 54 lbs (25 kg)
Monitor	19" Flat Panel Monitor 1280 x 1024 display Dimensions: 16" W x 13" H x 5" D (40 cm W x 33 cm H x 13 cm D) Weight: 14 lbs (6.35 kg)
Channels	Four channels; filters included: Cy3/Cy5 and Alexa 350/Alexa 488

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