Thermo Scientific™ X1 Upgrade

Latest technology for more knowledge about the cell

The Thermo Scientific™ X1 Upgrade takes the current Thermo Scientific™ ArrayScan™ VTI High Content Reader up to the latest technology with the new Photometrics™ X1 large field of view camera and new Dell™ T5600 Computer. With more resolution, a larger field-of-view and more powerful computing, the X1 upgrade is the affordable way to get the latest innovative technology for the world’s most productive high content reader.

Photometrics X1 2200 x 2200

ORCA-R2 1024 x 1024

Figure 1: Photometrics X1 Upgrade, comparison of large field of view from Photometrics X1 compared to ORCA-R2 Camera standard field of view.

Highest Sensitivity of Any High Content Screening (HCS) Camera
By harnessing the photon-collecting power of the Sony SuperHAD microlens architecture, the X1 camera becomes the most sensitive camera available to HCS users without sacrificing resolution (4.54 μm/pixel).

See More in Less Images
The cutting-edge X1 camera is the most powerful HCS imaging tool to boost quantitative performance. See more of your biology in less images with the enlarged 2208 x 2208 pixel array. By ensuring reliability and reproducibility, the X1 camera’s CCD technology affords you the confidence to trust your data.

Powerful Yet Efficient Computing
Processing the data and images from the X1 camera is optimized with the Dell™ T5600 PC. Speed and reliability are key when handling the large volume of images and data high content generates, and the T5600 provides the processing speed and hardware reliability to get you closer to answering your most important biological questions.
X1 Upgrade Features

- Higher resolution and better sensitivity for dim biological samples than ORCA-R2™ Camera
- Twice the field-of-view than the ORCA-R2 Camera for more cells captured with less images
- 14-bit dynamic range to measure broader biological response with less chance of saturation
- New Dell technology with four-core processing and Windows™ 7 Professional, 64-bit Operating System
- Faster scan times for many biological assays

More Knowledge

- More knowledge about cellular information
- More knowledge about cells in their context
- Scientific validity through literature
- Focused execution with most experience
- Validated tools for detection and screening

X1 Upgrade Specifications

**Camera**

Photometrics X1 CCD: High-resolution, thermo-electrically cooled to 0°C; 14-bit dynamic range; 2208 x 2208 pixel array; 4.54 µm pixel size; 75% peak Quantum Efficiency (QE); USB 2.0 (no additional Camera Link™ or Firewire Cards needed); 1x, 2x2 or 4x4 binning options.

**PC**

Dell Precision T5600: Memory: 8GB, DDR3 RDIMM Memory, 1600MHz, ECC (4x2GB DIMMs); Processor: Four-Core XEON E5-2643, 3.3 GHz, 10M, 6.4 GT/s; Boot Hard Drive and 2nd Hard Drive: 146GB, 15K RPM 2.5” SAS 6Gb/s Hard Drive; Hard Drive Configuration: C4 SAS 2.5 in., 1-2 Hard Drives; Graphics: 512 MB NVIDIA Quadro NVS 300, DUAL MON, 2 DMS59; 8x DVD+/-RW SATA; OS: Windows 7 Professional, SP1, 64-bit; 24” Dell monitor, keyboard, mouse.

Ordering Information

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<tr>
<th>Product Name</th>
<th>Catalog Number</th>
<th>Description</th>
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<tr>
<td>X1 Upgrade for ArrayScan VTI HCS 500, 600 and 700 readers</td>
<td>N0100X1UPGRD</td>
<td>Includes high-resolution Photometrics X1 CCD, 14-bit camera, with large field of view and 4.54 µm/ pixel resolution and instrument PC and monitor (Dell Precision T5600, 825W, Genuine Windows 7 Professional, 64-Bit OS, four-core XEON E5-2643, 3.3GHz Processor, 8GB, DDR3 RDIMM Memory, Dell 24” High Resolution Widescreen Monitor). Includes installation and one-year warranty on installed parts.</td>
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