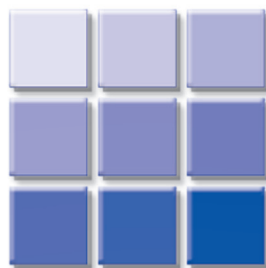
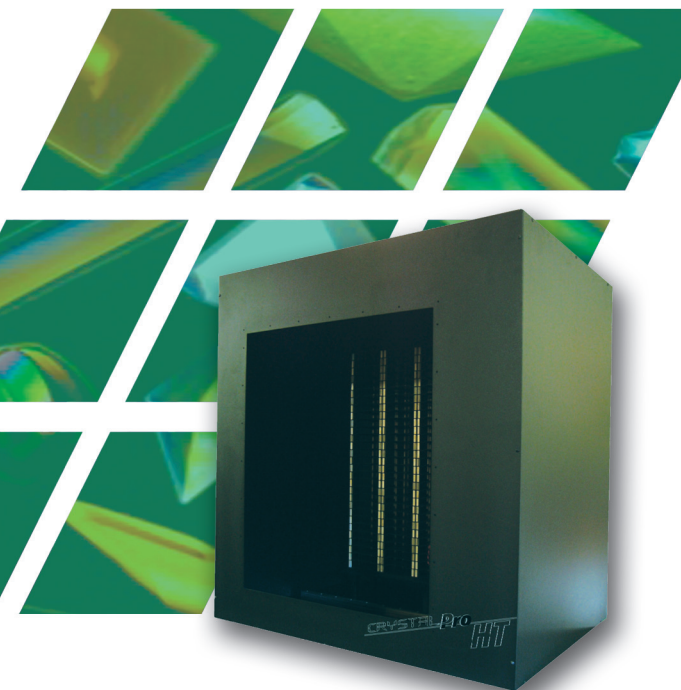


Crystal Pro HT

HIGH-THROUGHPUT SCREENING



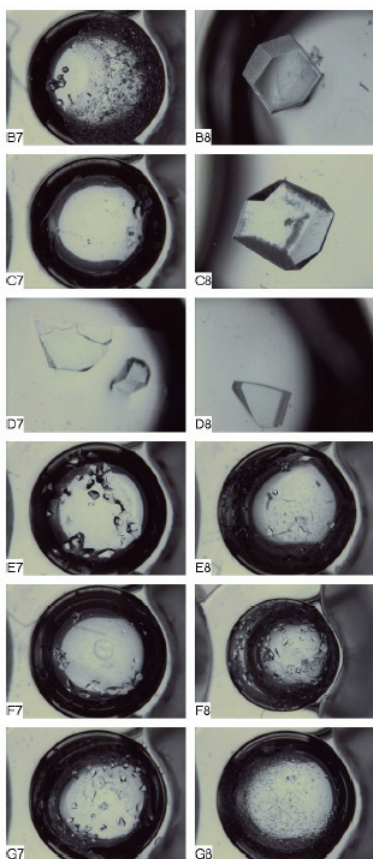
**Molecular
Dimensions
Limited**



High-throughput screening just got more affordable.

Molecular Dimensions, distributor of the world's most popular protein crystal imaging systems, introduce the CrystalPro™ HT, a self-contained plate storage hotel and imaging robot.

This newest addition to the CrystalPro™ product line accommodates 12, 56, and 112 SBS format crystallization trays. Crystallization plates can be loaded one at a time through an access door to minimize environmental changes inside the enclosure. Designed and built to take full advantage of CrystalLIMS™ and its multi-plate/multi-scan priority-based scheduling, the CrystalProHT scans 96-well crystallization trays in minutes as often as necessary as determined by the investigator. Barcode-based inventory is kept accurate by automatic stack scanning to ensure experiment synchronization.



- High-throughput unattended digital imaging and data acquisition
- Extended depth-of-field optics virtually eliminates need for Z-Slice Imaging
- User-defined priority-based experiment scheduling, including time-lapse studies with automatic well-change tracking
- Patented illumination design maximizes contrast while minimizing impact of sidewall diffraction rings
- Multiple focal plane imaging for high magnification area of interest
- CrystalLIMS™ interface/control software included
- Optimized for 12, 56, and 112 SBS format crystallization tray capacity
- Operational at 4°C to 40°C, 5% to 95% relative humidity environment via remote software access
- Barcode printing and tracking for hotel inventory
- Area-of-interest accomplished via optical zoom for maximum image resolution
- Optional camera upgrades available up to and including 16 MegaPixel Color Digital
- Optional compatibility for non-SBS format crystallization trays

Inverted Microscope with Optical Zoom

Extended depth-of-focus microscope with robotic control of field-of-view and image focus Field of View : 3.0mm to 0.82mm, Depth of Field : approx 1.5mm to 0.14mm

Cold Light Illumination

150 Watt computer-controlled, fiber-optic light source, 3200K color temp. Fiber light guide, IR Filter, Patented illumination scheme maximizing contrast while minimizing drop sidewall diffraction

Imaging System

Optimized for your experiment. High resolution 6.0 MegaPixel Digital Color Camera for nanolitre drops or high definition 2.0 MegaPixel Digital Color Camera for large volume drops. Optional 5.1 MegaPixel Digital Color Camera or 16 MegaPixel Digital Color Camera. (All cameras are USB 2.0 Interface)

System Control Electronics

A microcontroller unit (MCU) inside the microscope processes commands from the personal computer universal serial bus (USB) port. The MCU controls stepper motors and accessory electronics.

CrystalPro™ HT is a self-contained plate storage hotel and imaging robot designed for high-throughput unattended digital imaging and data acquisition. CrystalPro™ HT is supplied with CrystalLIMS as standard for totally remote experimental set-up, review and analysis. CrystalPro™ HT is available with capacities of 12, 56, and 112 SBS format crystallization trays with either an upright or an inverted microscope. Also available is an 84 plate capacity CrystalPro™ HT DUAL which houses both an upright and an inverted microscope. CrystalPro™ HT uses the same, premium optics as the other CrystalPro microscopes. The optics used have an extended depth of focus (1.4mm DOF at 3mm FOV). This depth of focus enables all objects in most drops to be in focus in a single image, thus negating the inclusion of artifacts due to multilayer superposition.

CrystalPro™ HT also shares the same patented illumination system as the other CrystalPro™ family members. The illumination maximizes contrast

Personal Computer & Monitor

Cube PC (8"Width x 8"Height x 12"Depth), Pentium IV, 2.8GHz, 1GB Memory, 250GB Hard Drive, 48x/24x/48x CD-RW, Integrated Intel 10/100 Ethernet Network Adapter, Microsoft Windows XP Professional, 20" LCD Color Monitor, Optional upgrades available

Barcode Label Reader

Scan engine designed to meet requirements of CDRH Class II and IEC Class 2 laser products. Automatically reads Bar Code labels centered on the side of plates at A12 - H12CDHR Class II/IEC Class 2 are defined as: Emission Duration: > 0.25 seconds, Accessible Emission Limit: < 1 milliwatt average radiant power

Barcode Labels

Operational programming includes the capability to print Code 39 labels on standard white return address labels. (Avery p/n 5267 80 labels/sheet, 25 sheets/package).

while minimizing impact of sidewall diffraction rings. The expert balancing of illumination with optics provides superior image quality with no need to artificially enhance the images to make them useable.

Full access to the plate hotel is given through sliding doors on the front of the system. The compact size of CrystalPro™ HT allows them to be sited on most bench tops for quick and easy installation in any laboratory or cold room. CrystalPro™ HT is designed and built to take full advantage of CrystalLIMS™ and its multi-plate/multi-scan priority-based scheduling and scanning options.

CrystalPro™ HT scans crystallization trays in minutes and to a schedule determined by the investigator. Plate movement is smooth and reliable to maintain the integrity of tray contents. Plates are identified by barcodes that are user defined and can be printed on standard printer labels from CrystalLIMS™.

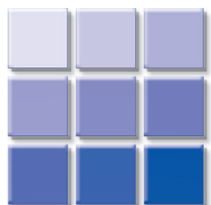
Enclosure and Capacity

	CP-HT 12	CP-HT 55	CP-HT 110	CP-HT DUAL
Width	46cm	66cm	91cm	91cm
Height	61cm	61cm	61cm	61cm
Depth	66cm	66cm	66cm	66cm
Capacity*	1 x 12	2 x 28	4 x 28	3 x 28

*(Capacity based on SBS standard format trays)

Environmental Considerations

Item	Operating Conditions		Power Dist.
PC	10 to 35°C	5 to 95% RH	275 Watts
LCD	0 to 40°C	10 to 90% RH	70 Watts
Lamp	0 to 45°C	5 to 95% RH	00 Watts
CP-HT	4 to 40°C	5 to 95% RH	35 Watts



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