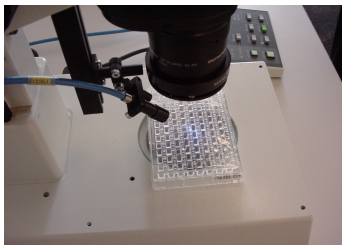
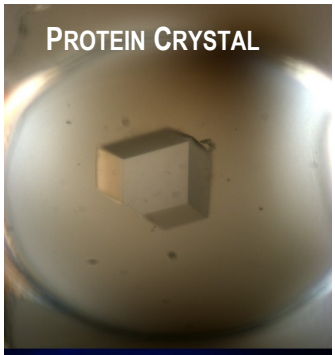
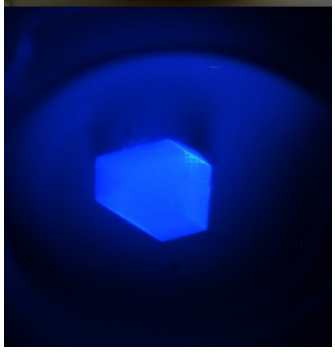
Molecular Dimensions

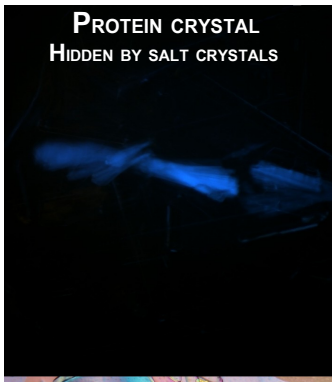
X-ta*Light*™ 100

UV Source









X-ta*Light*™ 100 offers a UV Fluorescence source *for you existing Microscope.*

A cost-effective, robust and easy-to-use Light Source, X-ta*light*™ 100 utilises integrated UV and white light sources to allow:

- ✓ Clear differentiation of protein/other biomolecules from salt crystals.
- ✓ Direct attachment to an existing microscope or imager.

Utilize the intrinsic fluorescence of proteins

Evaluation is based on tryptophan fluorescence. When excited with light at 280nm wavelength, it shows a strong emission at about 350nm. X-ta*Light*™ allows the mixing of UV and white light illumination for optimum image quality.

- ✓ Visualize small crystals against a background of precipitate.
- ✓ Minimum UV expose time to prevent crystal damage.

Speeding up your structure determination process

Effectively prioritize crystallization screen hits for either follow up or diffraction. Observe directly down the microscope or capture and display images with optional CCD camera.

- ✓ Reduce time wasted on false hits
- ✓ Easily combine light sources -change the ratio of white to UV light to assess potential hits.

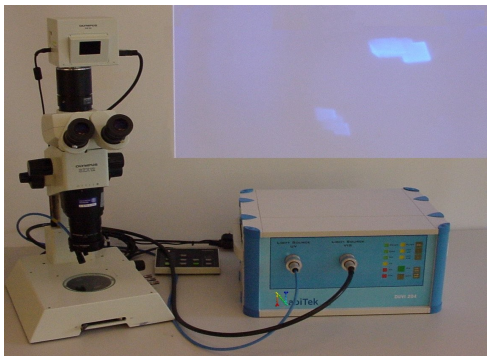
Upgradable

As part of the modular Spectro*Light*™ system, X-ta*Light*™ 100 is upgradable to a fully automated imaging system. State-of-the-art “in-drop” dynamic light scattering can also be added now or in the future. Be able to monitor every drop for nucleation and growth.

Discover more at:

www.moleculardimensions.com

X-TA*LIGHT*™ 100 TECHNICAL DATA



UV light source

Mercury arc lamp with 120W
- ✓ Lamp life time 4000h
- ✓ Motorised shutter and intensity control

White light source

Halogen lamp with 50W
- ✓ Lamp life time 2000h
- ✓ Motorised intensity control

Filter

Motorised filter change up to three positions:
- ✓ Pos 1: Shortpass 400nm
- ✓ Pos 2: Shortpass 320nm
- ☐ Pos 3: _____ nm

Control

Control of UV/white intensity, filter setting and shutter
- ✓ Manually
- ✓ Software control from PC over ethernet (Windows, Linux, Mac)
- ☐ Open interfacing to third party software

Light guides

Quartz light guide for **UV** light 1mm diam.
- ✓ Length 1.5m
- ☐ Length:_____ m

Liquid light guide for **white** light 5mm diam.
- ✓ Length 1.5m
- ☐ Length:_____ m

Dimensions

X-talight 100**:** Table-top case (RAL 7032)
- ✓ Portable unit
- ✓ ¾ 19”, 400 mm x 300 mm x 200mm (LxWxH)
- ✓ Weight: approx. 10kg
- ✓ Power consumption: 90 to 264V 200W

Computer

- ☐ Laptop ready to use ☐ Suse Linux ☐ Windows XP
- ☐ Desktop PC ready to use ☐ Suse Linux ☐ Windows
- ☐ Second monitor 19in. for **full** camera image display

Software features

X-talight - software runs on ☐ Linux, ☐ Windows, ☐ Mac machines
- ✓ No installation required, runs from removable USB-Source
- ✓ Full dynamic control of light sources
- ✓ Short UV exposure times to protect crystals against damage

With optional CCD camera:
- ✓ Live display of camera image
- ✓ Control of camera settings for UV and white light
- ✓ Easy acquisition of UV images, white light images and combinations
- ✓ Storage and retrieval of images in a data base

CCD Camera

Camera for adaptation to a microscope or to a stage
- ☐ 1024x768 pixels colour ☐ 1280x1024 pixels colour

UV optics

Focussing optics for directing UV light onto the sample
- ✓ Focal length 20mm with built-in blocking filter
- ☐ Focal length _____mm

Stage and Objective

- ☐ Manual stage ☐ Automated stage
- ☐ Microscope objective ☐ Microscope zoom objective
- ☐ Microscope motor zoom objective

Adaptation to existing:

- ☐ Microscope – type?_____
- ☐ Imager - type?_____