UPTO10:1 lossless image compression software for industry and research



JetRaw by Dotphoton



Easily integrated into your current workflow





80TB freed up!

FILES TO COMPRESS



C:/Images/Lab/PCOEdge/2020/

SAVE TO

Browse

C:/Images/Lab/PCOEdge/2020/Compressed

Preserve folder structure

Compress 140k files

Cross-platform solution





X

JetRaw key features

Up to 10:1

Up to 10:1 lossless compression thanks to innovative scientific approach

Lossless compression For all unprocessed raw image data

DOTPHOTON.COM/JETRAW



Preserved workflow

Compatible with most image processing software

Your usual TIFF format

Compressed files are encoded into universally acceptable TIFF format



Why you need JetRaw. Manage your raw image data faster

80%

Reduce storage costs by 80% (see benefit calculator)

5-10X

Faster image data Long term transfer preservation with free decoder

DOTPHOTON.COM/JETRAW

RAW IMAGE COMPRESSION FOR MICROSCOPY



1()()

MPixels/s/core processing power



Easy to set up, fun to use. JetRaw is a plug and play solution designed for scientific labs from the ground up

COMMAND SDK IINF

Faster image data transfer

MPixels/s/core processing power

DOTPHOTON.COM/JETRAW

RAW IMAGE COMPRESSION FOR MICROSCOPY



Reduce storage costs by 80% (see benefit calculator)



Validation

To validate our compression for applications in microscopy, we partnered with academic institutions and developed a methodology to test the reliability of compressed data in today's widespread analysis scenarios, as well as testing processing "primitives" to secure compatibility with future applications.

Validated imaging techniques

- -2-D and 3-D segmentation
- -2-D and 3-D stitching
- -Tomography
- -Deconvolution
- -Particle sizing

Validated cameras

- -Fluorescence microscopes
- —Phase-contrast microscopes
- -Light-sheet microscopes

DOTPHOTON.COM/JETRAW



RAW IMAGE COMPRESSION FOR MICROSCOPY



Validation

The base algorithm is mathematically analyzed and proven to retain information to within a strict bound.

The software/ hardware implementation is tested through a series of automated unit, integration and system testing

DOTPHOTON.COM/JETRAW



The full system, consisting of camera->compressor->decompressor is "black box" tested, ensuring that the decompressed pixel value is within the original uncertainty of the camera

Application testing: academic partners compare results of their image processing algorithms on raw and on compressed data, and verify that these are statistically equivalent.



Customer success is our core value

•High Content screening and automated microscopy imaging is generating massive amount of images which we need to store and make available to scientist and the public through open access data repository. This is a huge technical challenge and it has a nonnegligible environmental impact. Therefore, I became highly interested by Dotphoton's technology to drastically reduce the size of ou data, without any comprise on its content, which we confirmed through deep image quantifications.

DOTPHOTON.COM/JETRAW







PCO cameras supported. Want a different camera? Write to us

get@dotphoton.com +41(0)415525000

DOTPHOTON.COM/JETRAW





RAW IMAGE COMPRESSION FOR MICROSCOPY

