Dotphoton and Hamamatsu Photonics are partnering to provide the **ultimate raw image compression** and address the ever-growing biomedical image data volume.

April 26, 2022 - Dotphoton, an industry-leading raw image compression company and Hamamatsu Photonics, a world leader in optical systems and photonics manufacturing, are pleased to announce their new partnership.

Modern microscopy, drug discovery and cell research are among the many applications that rely on the highest quality image data. Hamamatsu, a renowned scientific camera manufacturer, provides the ultimate image quality needed for scientific research and pharmaceutical industry in fields such as light-sheet microscopy, high-throughput screening, and histopathology.

In these applications, the generation of large volumes of data leads to low scalability and high costs and complexity of required IT infrastructure. This new partnership enables researchers to capture and preserve higher volumes of quality data, and to make the most of modern processing methods, including AI-based image processing.

Hamamatsu Photonics
ORCA cameras now
support Jetraw

"In industry and academia, storage budgets grow exponentially every year, the increase of datacenter costs and its CO_2 impact reduce the amount of resources available for research. We have built Jetraw to address all these problems at once, and are very happy to partner with Hamamatsu Photonics to make large image data more reliable and sustainable, and help many wonderful discoveries to happen", says Eugenia Balysheva, CEO of Dotphoton.

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JETRAW
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Hamamatsu Photonics Europe
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Hamamatsu offers advanced imaging technology on the forefront of the development of new and existing scientific applications. Today, Hamamatsu's ORCA cameras are compatible with Dotphoton's Jetraw software. Thanks to this new partnership, Hamamatsu will be able to support customers in their data management, an additional benefit to the high-sensitivity, fast readout speeds, and low noise delivery of its scientific CMOS cameras.

The Jetraw software provides the highest raw image compression ratio in the market combined with the highest processing speed. That means that Hamamatsu camera users can benefit from the fully preserved raw image data without constraints linked to storage and data transfer speed. Jetraw enables reduction of storage costs by 80%, CO_2 emissions by 73%, and data transfer speed by 5-7x.

Research sample by Wyss Center for Bio and Neuroengineering. Acquired on Hamamatsu ORCA-Flash 4.0 and compressed with Jetraw
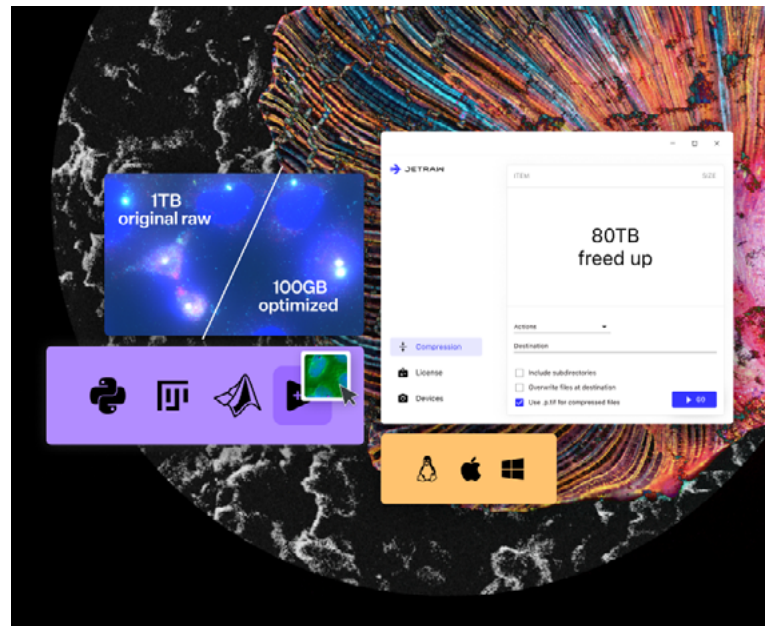
"At Hamamatsu, our aim is to support customers achieve their ambitions. In the case of our scientific research customers, we understood the need for them to easily share and manage their ever-increasing data creation. Our scientific cameras produce incredibly fast, quantitative imagery that our customers develop at a high volume. Thanks to our new partnership with Dotphoton, we can support our customers one step further by offering them

the possibility to reduce their file sizes without ever compromising the quality of their work. We look forward to this collaboration and the exciting possibilities now presented to our customers." explained by Marco Mayer, the Strategic Business Development Manager of Hamamatsu Europe.

Jetraw software is available for the range of Hamamatsu ORCA cameras, and can be purchased at the Jetraw.com website. Jetraw is compatible with most popular image processing workflows and enables long-term scalability and reliability of image processing.

"Working in developmental biology we need to acquire large time-lapse movies to capture the dynamics of the growing zebrafish embryo. We struggle to interact with our tera-byte size data due to slow data transfer and expensive storage. With Jetraw's compression (from 913GB to 115GB per movie, as an example) we solved these issues with the perk of not losing any information on the data even when performing our routine analysis." Arianne Bercowsky, Oates Group, EPFL, Switzerland – a user of a Hamamatsu ORCA-Fusion BT camera within Viventis LS1 Live Light Sheet Microscope System.

More information

Dotphoton is a Swiss-based technology company that provides innovative image data compression solutions which enable efficiency and reliability of large image data processing in critical applications.

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Hamamatsu Photonics offers a wide range of highly sophisticated scientific cameras ideal for researchers studying the life sciences. Present since 1953 and driven by Japanese excellence, its capabilities are rooted in photonics technology including optics, electronics, mechanics and software.

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