

NÜVÜ'S EMCCD FOR NANOSATELLITES

MONTREAL, QC, CANADA, June 9, 2022 /EINPresswire.com/ -- <u>Nuvu Cameras</u> is on its way to occupying a prime position in space exploration with the development of its proprietary low light imaging solution for nanosatellites.

Since its founding, Nuvu Cameras has taken the lead with its unmatched photon counting imaging capability and reliability in supporting detectors



for demanding low light applications. Thanks to developments carried out for the Canadian Space Agency (CSA), Nuvu Cameras' industry-leading Electron Multiplying Charge Coupled Device (<u>EMCCD</u>) technology is being integrated into NASA's Roman Space Telescope.

In early 2021, the CSA awarded Nuvu Cameras a contract as part of its Space Technology Development Program to develop an EMCCD imaging solution capable of fulfilling a wide range of nanosatellite (nanosat) missions' requirements. The proposed work would scale the capability of Nuvu's EMCCD high-performance technology to target low-cost missions, giving the company further leverage to be considered in all relevant future space missions.

In April 2022, the CSA authorized manufacturing of the proposed solution, optimized for a 6U CubeSat in low-Earth orbit. A CubeSat is a type of Nanosat with a standardized size where 1U equals 10cm x 10cm x 10cm. During the design phase, Nuvu was able to count on the support and advice of Dr. René Doyon and his team, experienced with exoplanet exploration and space missions, and of Dr. Leon K. Harding and his team, experts in CubeSat spacecraft and mission design, implementation and operation. All the expertise combined with their knowledge in using Nuvu's EMCCD technology contributed to the success of the design review milestone.

Along with the ability for spaceborne direct imaging of planets outside of our solar system, the EMCCD technology offers tangible benefits for many crucial applications in space. For adaptive optics, it improves the correction of aberrations during the observation of far objects. In the growing field of space domain awareness (SDA), using an EMCCD enables the detection of smaller and faster objects regardless of their composition. Dr. Simon Thibault has presented his future work in space using EMCCD for SDA during the SPIE Defense + Commercial Sensing 2022

conference.

Manufacturing the EMCCD <u>nuSpace</u> imaging solution for nanosat democratizes the EMCCD technology, again bringing the Canadian Eye to the forefront of upcoming space missions.

About Nuvu Cameras:

Founded and based in Montreal in 2010, Nuvu Cameras is a world leader in ultra-sensitive imaging solutions. The company designs and manufactures high-end CCD & EMCCD cameras and controllers for ground- and space-based applications.

Laurence Deziel Nuvu Cameras Inc. info@nuvucameras.com Visit us on social media: Facebook Twitter LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/574612369

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire[™], tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2022 Newsmatics Inc. All Right Reserved.