Press Release

eagleyard CHARMS SMALL SATELLITE MERLIN
Helping measuring methane gas concentration for a better understanding of climate change.

Berlin/Germany, 20th June 2017: eagleyard Photonics GmbH enables SpaceTech GmbH/Immenstaad to build the LIDAR Frequency Reference Unit for German-French small satellite mission MERLIN (Methane Remote Sensing LIDAR Mission).

With a scheduled launch for 2021, the German-French satellite mission is laid out to measure methane gas concentration by means of a LIDAR instrument (LIght Detection And Ranging) sending laser light pulses into the atmosphere and determining the gas concentration by the characteristics of the reflected light.

eagleyard Photonics is now assigned by SpaceTech to deliver the space qualified DFB seed laser diodes at 1064nm and 1645nm for the whole program – as well as for the corresponding qualification campaign. Including particularly the 2nd generation of engineering models in 2017, the qualification models and the flight models in 2018. SpaceTech is the responsible contractor for the frequency-reference-unit of the LIDAR instrument of the entire mission program.

The decision to choose eagleyard as the supplier for the DFB seed laser diodes was based not only on its one-stop product portfolio - offering both required wavelengths of 1064nm and 1645nm simultaneously. But also on eagleyard’s international successful space references - highlighting the successful ESA-GAIA mission as well as the NASA C.A.T.S. (Cloud Aerosol Transmission System) mission, both utilizing eagleyard’s 14-pin butterfly DFB laser diodes. In fact the NASA C.A.T.S mission is already operating a LIDAR instrument on board of the International Space Station (ISS) seeded by an eagleyard laser diode.

Last but not least eagleyard was chosen for the capability of its quality division providing competence and authority to autonomously run a space related Lot Acceptance Test campaign (LAT) fully compliant with their customers' needs.

Temperature cycle tests, vibrational and shock tests, radiation tests and life time tests are part of a larger variety of harsh environmental test runs.
Its long lasting experience with the successful execution of such LAT campaigns, in conjunction with a careful balance between necessary quality assurance aspects within budget constraints made eagleyard furthermore a contributing member of ESA Photonics Working Group. This body defines and proposes useful guidelines for ESCC standards in order to qualify laser diodes in a meaningful way for space applications.

If you would like to learn more about eagleyard Photonics and its laser diode portfolio and how we can support your application please come and visit us at Laser World of Photonics in Munich from 26 – 29 June. You will find us in Hall B2 at booth #330.

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**Ordering Information:**

800 Village Walk #316
Guilford, CT 06437
Ph: 203-401-8093

Email orders to: sales@xsoptix.com
Fax orders to: 800-878-7282

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**About eagleyard:**

**eagleyard Photonics**' core competence is the development, production and sale of innovative high-power laser diodes based on GaAs (Gallium Arsenide). Its portfolio contains laser diodes with wavelengths ranging from 633 nm to 1120 nm. These laser diodes are addressing a variety of applications such as aerospace and defense, spectroscopy, medical instrumentation, test & measurement and material analysis. The Portfolio is split in five product families: Single Mode Laser Diodes, Single Frequency Laser Diodes, Multimode Laser Diodes, Tapered Amplifiers and Gain Chips. **eagleyard** is represented worldwide, in particular in Europe, Asia and the United States of America. **eagleyard Photonics** started as a spin-off from the **Ferdinand-Braun Institut (FBH)** in 2002. In 2013 **Toptica Photonics AG** has acquired the majority ownership of Berlin-based **eagleyard Photonics** GmbH. For more information, please visit our website at [www.eagleyard.com](http://www.eagleyard.com)