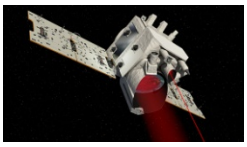
eagleyard Photonics GmbH
Rudower Chaussee 29
12489 Berlin/Germany

Press Release



Marketing Contact
Sandra Chudek
Tel. + 49 30 6392 4520
Fax + 49 30 6392 4529
sandra.chudek@eagleyard.com

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 (**LI**ght **D**etection **A**nd **R**anging) 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. (**C**loud **A**erosol **T**ransmission **S**ystem) 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 **I**nternational **S**pace **S**tation (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 **L**ot **A**cceptance **T**est 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.

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 sorted in five product families: Single Mode Laser Diodes, Single Frequency Laser Diodes (DFB), Multimode Laser Diodes, Tapered Amplifiers and Gain Chips. These laser diodes are addressing a variety of applications such as space, aerospace and defense, metrology, spectroscopy, medical instrumentation, test & measurement and material analysis. *eagleyard* is represented worldwide, in particular in Europe, Asia and the United States of America direct and also by sales partners. *eagleyard Photonics* started as a rapidly growing spin-off from the *Ferdinand-Braun Institut (FBH)* in 2002. Since it belongs to the Munich-based TOPTICA Group. For more information, please visit our website at www.eagleyard.com