

ABB Secures USD30 Million Satellite Imaging Technology Order



ABB has been awarded a contract to develop and manufacture nextgeneration multispectral imaging systems to be placed on ten satellites that will circle the Earth. The order, worth around US\$30 million, was booked in the first quarter of 2022 and includes an in-orbit spare satellite. The contract has been awarded by the Canadian data and analytics company EarthDaily Analytics Corp (EDA).

Multispectral imaging systems capture data at specific light frequencies across a wide spectrum, and the EarthDaily Constellation network of satellites will be able to provide high-quality imagery in 22 spectral bands with resolution down to five metres.

"We are proud to collaborate with ABB on the development of the ground-breaking EarthDaily Constellation, which will provide unprecedented daily global coverage of the Earth at ultra-high, scientific-grade image quality. Current Earth observation satellite systems provide either high image quality with low coverage or low image quality with high coverage. The EarthDaily Constellation brings high image quality and rich spectral band diversity together with daily global coverage – something that has never been available before. ABB's long track record of success at the forefront of space sensors and Earth observation provides us with not only best-in-class technology, but also the confidence that comes from working closely with a leading technology company," said Don Osborne, CEO, EarthDaily Analytics.

Processing Geospatial Data with Artificial Intelligence-based Analytics

Once deployed on the network of satellites, ABB's technology will continuously capture images of the planet's land masses and large maritime areas as the satellites circle the Earth. EDA's artificial intelligence-based analytics system will then process the data gathered from these images based on any recorded changes and generate actionable insights that will include information on the state of Earth's ecosystems, as well as on the impact and progress of the changing climate.

In addition to providing insights into climate change, these measurements could help scientists address some of the world's greatest challenges – from the monitoring of crop health to the prediction of forest fire trajectories. The data gathered provides valuable insight that enables increased support for positive environmental action, including conservation and sustainable resource management.

Artist rendering of the EarthDaily constellation satellite. (Courtesy: Loft Orbital)

Multispectral Imaging Technology

"ABB is proud to be part of the EarthDaily Constellation project set to transform the understanding of natural and human-caused change on Earth. Our state-of-the-art multispectral imaging technology is the result of our rich expertise in industrial analyser solutions and over two decades of experience in space programmes. ABB being awarded this contract is testimony to the competitivity of our offering in the rapidly evolving private space sector. We are confident that this project will be key to empowering industries across diverse domains to make the best possible decisions for their businesses and reach their sustainability goals," said Jacques Mulbert, President measurement & Analytics Division, ABB.

Working on this project, ABB will collaborate with specialist in IT solutions for space Xiphos Systems Corporation on high-performance processing electronics, as well as with Loft Orbital, the space infrastructure service provider for <u>EarthDaily Constellation</u>.

The year of 2022 marks 100 combined years of reliable operations for all of ABB's optical equipment in orbit with core contributions to flagship missions of space agencies around the world. The space group within ABB's Measurement & Analytics Division specializes in advancing measurement capabilities from space, from enabling daily weather forecasts to precisely

| onitoring the rise of gree | nhouse gases or spotting | g strong emitters. | | | |
|----------------------------|--------------------------|------------------------|-------------------------|----------------|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| nttps://www.gim-internatio | nal.com/content/news/ab | b-secures-usd30-millio | on-satellite-imaging-te | chnology-order | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |