



[Press Release]

Whatever the weather: IDRS™ comms tech successfully activated onboard innovative, 'see all' iQPS SAR satellite

July, 26, 2023

Leading Japanese synthetic aperture radar (SAR) satellite constellation company Institute for Q-shu Pioneers of Space, Inc. (iQPS) and communication specialists Addvalue are delighted to announce the successful activation of the IDRS™ service onboard the recently launched QPS-SAR-6 satellite in June 2023 during its initial checkout operation. By equipping its lightweight SAR technology with 'always-on', on-demand IDRS™ data connection capabilities, iQPS gets capability of persistent connectivity with its fleet of QPS-SAR satellites. This capability leads to rapid, real-time tasking of high-res SAR images and real-time management of the whole constellation to ensure optimal download and delivery of SAR images for its users.

iQPS has successfully developed the small SAR satellite "QPS-SAR" that provides SAR images with the world's best-in-class resolution and image quality – even at night or in bad weather. The company aims to establish a 36-QPS-SAR satellite constellation that will enable observation almost anywhere in the world at an average 10-minute interval. Presently, iQPS operates a total of three QPS-SARs, including QPS-SAR-1 "IZANAGI" and QPS-SAR-2 "IZANAMI", and the latest launch of QPS-SAR-6 "AMATERU-III".

Unfortunately, QPS-SAR-3 and -4 – which were expected to achieve even higher resolution and image quality and were also equipped with the IDRS™ service – did not make it into orbit due to rocket failure in October 2022. However, the most recent



launch of AMATERU-III in June 2023 is now set to write a new chapter in this powerful technology's development. On July 25th, iQPS released spotlight images of AMATERU-III with azimuth resolution of 46cm and range resolution of 39 cm, the finest resolution ever achieved by a Japanese commercial SAR satellite. This latest launch typifies the pioneering spirit and innovation that underpins the core iQPS mission. This is to expand the possibilities of space by using cost-effective satellites to gather a vast range of time-sensitive observable data to inform better decision making – from the movement of people, ships and road traffic, through to crops and natural disasters, and infrastructure management.

The game-changing IDRS™ solution makes this possible using the world's only 'always-on', on-demand, real-time connection for any LEO satellite. This enables access to persistent data connection and transfer services with LEO satellites across all orbital inclinations up to altitudes of 1000 km and removes the need for restrictive earth station scheduling for managing or tasking the constellation. This is achieved through connecting to the global ELERA constellation of GEO satellites and BGAN ground infrastructure, which are now operated by Viasat, Inc. following their recent acquisition of Inmarsat, to deliver global, advanced L-band coverage and connectivity in near real time.

iQPS Chief Executive Officer, Dr. Shunsuke Onishi, said, "We're very pleased to be working with Addvalue to enhance our SAR image data operations and ensure the fast response for user demands. We believe that Addvalue's IDRS™ can strengthen the management and agility of our fleet of innovative SAR satellites by delivering task orders and monitoring the fleet in real time. By working with Addvalue IDRS on the QPS-SAR-6 launch, we'll be able to quickly reach our goal of providing high-resolution imagery to the world in a timely manner."

Tan Khai Pang, Chief Executive Officer of Addvalue, commented, "We're honored to be working with iQPS to support its exceptional offering of SAR images with 46cm



resolution. By drawing on our proven experience using the ELERA network to drive our real-time IDRS™ data relay solution, we can help iQPS enhance its clients' decision making in countless observational scenarios in nearly all areas of the globe."

"Viasat is delighted to be the provider of the communications link supporting Addvalue IDRS and iQPS," said Todd McDonell, president of Global Government at Viasat. "Viasat is very excited about bringing reliable and resilient space-relay capabilities to meet LEO connectivity and data transport needs. The [ELERA](#) geostationary satellites and global ground network combined with Addvalue's space-qualified terminals enable continuous command and control of the QPS-SAR satellites in real time using the IDRS solution and its 'Always On' link."

■ About iQPS

iQPS is a space start-up founded in 2005 by two Emeritus Professors of Kyushu University and a rocket developer to establish the space industry in the Kyushu region in Japan. Based on more than 20 years of technology in the development of small satellites at Kyushu University, now iQPS brings together young engineers and industrialists with a team of pioneering professors emeritus. In addition, iQPS's business is strongly supported by more than 25 partner companies, mostly in northern Kyushu. Today, iQPS is aiming to construct a constellation of 36 of small satellites, leveraging the SAR radar, enabling clients to observe the Earth, anytime and anywhere.

Learn more at <https://i-qps.net/>

■ About ADDVALUE INNOVATION

Addvalue Innovation Pte Ltd, a wholly-owned subsidiary of SGX Mainboard-listed Addvalue Technologies Ltd (A31), is a leading satellite-based communication solutions company. Addvalue provides state-of-the-art communication terminals for use in space, in the air, at sea and on the ground. The company also offers extensive engineering and integration services. Addvalue's expertise extends far beyond where the world's terrestrial networks end. Whatever the market or application, the company's wide range of satellite-based products and services can offer the right technology to drive enhanced connectivity.

Learn more at www.addvaluetech.com



■ About Viasat

Viasat is a global communications company that believes everyone and everything in the world can be connected. With offices in 24 countries around the world, our mission shapes how consumers, businesses, governments and militaries around the world communicate and connect. Viasat is developing the ultimate global communications network to power high-quality, reliable, secure, affordable, fast connections to positively impact people's lives anywhere they are—on the ground, in the air or at sea, while building a sustainable future in space. On May 30, 2023, Viasat completed its acquisition of Inmarsat, combining the teams, technologies and resources of the two companies to create a new global communications partner. Learn more at www.viasat.com, the [Viasat News Room](#) or follow us on [Facebook](#), [Instagram](#), [LinkedIn](#), [Twitter](#) or [YouTube](#).