

CAS500

KARI is developing the CAS500-1 system, to meet the public needs for satellite images efficiently, to expand the domestic satellite industrial base, to cultivate related industry, and to promote satellite exports.

CAS500 series will adopt the medium-sized standard platform which will be developed for the CAS500-1 system. It will save the time and cost for the development considerably. And domestically developed payloads, such as electro optical cameras, microwave probes and hyper-spectral imager will be installed on the standard platform.

CAS500 program is divided into phase I and phase II. In phase I, 500kg class standard platform will be developed. And two 0.5m resolution electro-optical satellites (CAS500-1 and CAS500-2) will be developed by using that platform.

While developing the CAS500-1 system, KARI will transfer the satellite technologies accumulated over the years to the domestic industry and the CAS500-2 whose specification is identical to that of CAS500-1, will be developed by domestic industry.

The CAS500-1 will be launched in 2019 and CAS500-2 in 2020.

The CAS500 can be easily commercialized as it can be developed in a relatively short period of time at a low cost compared to medium to large sized commercial satellite. In addition to that, by developing multiple satellites in a short time and operating them simultaneously, it will help satisfy various public needs for earth observation and reduce the observation interval.

● Key Specifications the CAS500-1

Type	Specifications
Satellite System	Mass : App. 500kg (incl. payload and fuel) Mission Lifetime : > 4 years Operating Orbit : Sun synchronous circular orbit (altitude around 500km)
Electronic Optical Payload	Resolution : < 0.5m (Panchromatic: PAN), < 2.0m (Multi-spectral: MS) (based on altitude of 500km) Wavelength spectrum: 450 - 900nm (PAN 1band, MS 4bands) Swath Width: > 12km

