

ASTRO APS

Active Pixel Sensor

Our ASTRO APS star sensor (star Tracker) is used by our customers in the space industry worldwide. From America (including Boeing, MAXAR, NASA) through Europe (including Airbus Defense and Space, OHB, ESA) to Asia (including JAXA), the ASTRO APS has established itself as a reliable and powerful star sensor. Alphasat (2013), Orion (planned in 2021), Roman Space-Telescope (to be launched in 2025) and MSR-ERO (to be launched in 2026) are just a few examples of missions which rely on the ASTRO APS.

ASTRO APS is an autonomous star sensor with the most advanced radiation hard CMOS Active Pixel Sensor (APS) detector Technology.

A single box design has been chosen with minimized dimensions, low mass and low power consumption while maximizing the ease of integration on the spacecraft. ASTRO APS shows high reliability and radiation hardness by careful selection of EEE Parts, reduced number of components and special software algorithms to cope with radiation events.

The technical key parameters of the APS based star sensor are the low mass budget with approx. 2kg, the low power consumption with approx. 5W and the attitude quaternion accuracy of 18 years life time,