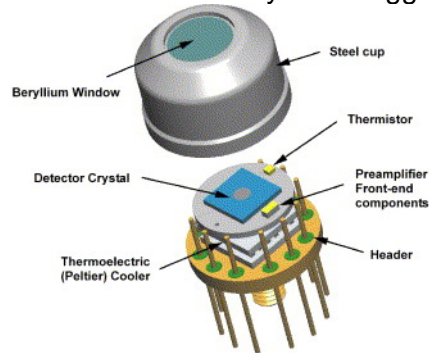


X-Ray Flux Monitor for CubeSats (XFM-CS)

2018-02-15 18:08 by Piers Jiggins



ESA has signed a contract with ISAWARE (<http://www.isaware.fi/>) to develop and manufacture an X-Ray Flux Monitor to Fly on a CubeSat in order to provide an in-orbit demonstration of the technology using reduced resources in preparation for a fully space-qualified version some years from now.

The final XFM is planned to fly on the planned LAGRANGE mission being developed as part of ESA's SSA (Space Situational Awareness) programme. The first version will be a low-cost version using COTS (Customer Off-The-Shelf) components where necessary in order to provide the concept. A full path-to-flight for the final XFM will be assured.

The team at ISAWARE have previous expertise working on such monitors for ESA's SMART-1 and BepiColombo missions and the Indian lunar satellite Chandrayaan-1 (see image).

XFM is needed for the detection of solar X-ray flares; one of the most energetic phenomena on the Sun giving rise to Space Weather phenomena in the heliosphere up to the Earth's distance and beyond. The capability to observe and classify solar flares is a key component for services which forecast Space Weather and its effects.

The contract was signed in December 2017 by Mr Juhani Houvelin (Chairman ISAWARE) and Mrs Carla Signorini (Head of Electrical Department in ESA's Directorate of Technology, Engineering and Quality). The activity is planned to last 18 months and commenced at the start of 2018.

[Go back](#)