

## **SITAEEL for Solar Orbiter: Italian technology flying to the Sun**

*ESA/NASA mission, the new Sun explorer Solar Orbiter has been launched from NASA's Kennedy Space Center. The mission will answer some of the biggest questions in solar science, SITAEEL contributed with its technology on different core experiments on board.*

**Cape Canaveral, February 9<sup>th</sup>, 2020** – Everything worked as planned on board of the Atlas V 411 rocket for the ESA/NASA Solar Orbiter Mission, lifted off from NASA's Kennedy Space Center, Florida February 9<sup>th</sup>, 2020 at 11:03 p.m. local Time.

Solar Orbiter is a 7-years mission dedicated to the study the Sun and its environment. The aim of the mission is to perform detailed measurements of the inner heliosphere and the nascent solar winds, and also to make close observations of the polar regions of the Sun, which have never been observed before.

SITAEEL delivered its technology for various core instruments of the satellite.

In particular, the company developed:

- for **OHB-Italia and ASI**, the [Power and Processing Unit for the METIS Coronagraph a fully Italian instrument](#) and one of the most important Solar Orbiter experiments, conceived for simultaneously imaging the visible and ultraviolet emission of the Sun's corona. SITAEEL electronics will command the METIS instrument operations: METIS, conceived by INAF Torino, will diagnose, with unprecedented temporal coverage and spatial resolution, the structures and dynamics of the solar corona;
- for **ASI, with an Italian team of Industries led by TSD**, the [Data Processing Unit \(DPU\)](#) of the **Solar Wind Analyzer (SWA)**, which will measure solar wind speed, density and composition and will relate the solar wind with its source regions. The modules developed by SITAEEL are the hearth and the brain for the four sensors of the Solar Wind Analyzer;

- for the **European Space Agency ESA** the [High Voltage Power Supply](#) units for the **STIX payload**, which will provide images of X-ray emitted by the Sun. SITAEL is one of the few companies in Europe able to provide such an high voltage technology.

Already a reference partner in over 30 space international missions, SITAEL is proud to be part of Solar Orbiter mission with various hi-tech elements: this presence confirms once more the company position as a leading player in the global space business.

Solar Orbiter represents a fundamental step in the Solar System research because it will allow to observe and study our Sun and its poles at close distance for the first time in the history of mankind. The Sun activity plays an important role in Earth economy: understanding its mechanisms in detail can protect, among others, Telecommunications and Energy Distribution.

**About SITAEL S.p.A. – [www.sitael.com](http://www.sitael.com)**

*SITAEL is the largest privately-owned Space Company in Italy and worldwide leader in the Small Satellites sector. With highly qualified employees and state-of-the-art facilities, SITAEL covers a wide range of activities in development of small satellite platforms, advanced propulsion systems and on board avionics, providing turn-key solutions for Earth observation, telecom and science.*

*Being one of the main players of the Space Economy, SITAEL is changing the way to conceive space products, both in the upstream and downstream segments, providing, thanks to its IoT capabilities, competitive smart services for a wide range of applications.*

*SITAEL belongs to Angel Group, an Italian holding world leader in Railway, Aerospace and Aeronautics markets. For further information visit [www.sitael.com](http://www.sitael.com)*