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UNISAT-6: MISSION RESULTS AND LESSONS LEARNED ABOUT AN INNOVATIVE  
MULTIPURPOSE MICRO SATELLITE.**Abstract**

UniSat-6 is a micro satellite built by the Italian company G.A.U.S.S. S.r.l. and it has been successfully launched into Space on June 19th, 2014. The main and innovative feature of this satellite is its multi-functionality. Indeed, UniSat-6, with only 26kg of weight and the cubic shape of about 40cm by side, has been designed to be at the same time a platform to release in orbit various CubeSats pico-satellites and it also has its own mission to complete with payloads fixed on-board. On November 23rd, 2013, less than a year before the launch of UniSat-6, its predecessor, UniSat-5, has carried into orbit seven satellites of which three were CubeSats and four were PocketQubes (the first time in orbit for this class of femto-satellites). Thanks to the experience achieved, G.A.U.S.S. S.r.l. is able to manufacture low cost satellites, nevertheless ensuring several grades of reliability. Indeed, UniSat-6 is made with COTS components, at least of industrial and automotive grade, that offer the advantage of designing powerful and advanced devices with a high integration ratio. This makes also possible to have many grades of redundancy to guarantee the primary purpose of the satellite. Other feature of UniSat-6 is the low power consumption, designed for a longer life time and to use a lower number of solar cells with advantages on the cost of the satellite. After about ten months of successful operations, thanks to several sensors and the on-board camera, Gauss Team has collected a great amount of data and pictures around the world.

In this paper the satellite UniSat-6 will be presented both as launch platform and as standalone spacecraft. More details will be provided about the structure, the electronics and the strategy adopted to guarantee the successful accomplishment of the mission. Moreover, some results and considerations will be shown, originating from data and experience acquired on the mission accomplished until now.