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UPDATING THE CUBESAT STANDARD TO KEEP PACE WITH A GROWING INDUSTRY

Abstract

The original CubeSat Design Specification (CDS) introduced the CubeSat Standard to the world almost two decades ago. It defined the physical and electrical characteristics for a 1U size CubeSat and included requirements for interfacing with the only CubeSat dispenser available at the time, the Poly-Pico Orbital Deployer (P-POD). Since then the industry has expanded to include more standard sizes and additional dispensers with varying options. To accommodate these new advancements, the CDS has been restructured to be more flexible and inclusive of developments within the industry. Requirements that were originally written specifically for the P-POD will encompass requirements for all dispensers currently available. It is also the intention for the new CDS to identify available options on each dispenser that is widely available for use. The new CDS will also define all U configurations in one document with one set of requirements for ease of reference. The new CDS is the first step for any developer beginning their CubeSat design.