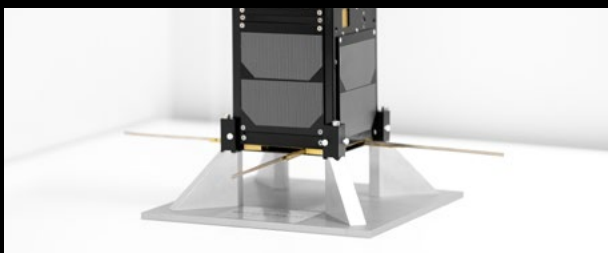


# MECHANICAL GROUND SUPPORT EQUIPMENT

## INTEGRATION SUPPORT JIGS FOR CUBESAT

Integration support jigs provide a safe vertical or horizontal position for the spacecraft while maintaining maximum accessibility to its components. CubeSat is secured by locking screws to provide stability, making it ideal for all necessary handling including integration, ground testing, and system calibration.

- ▶ Suitable for 1U, 2U and 3U CubeSats.
- ▶ Compatible with latest CubeSat standards
- ▶ Vacuum compatible modification available, suitable for Thermal vacuum performance testing and qualification campaign
- ▶ ESD compatible modification available

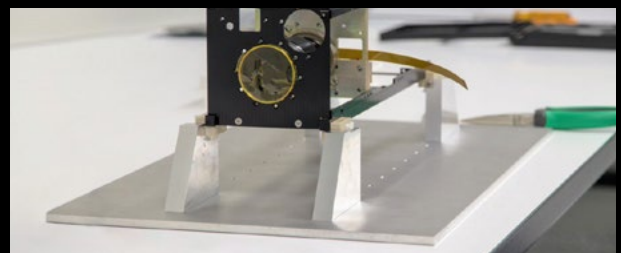


### VERTICAL SUPPORT JIG

Vertical Support Jig is best used for a CubeSat which is almost completely assembled and undergoing integration of the final payloads or subsystems. Minimal surrounding contact makes it suitable for TVC campaigns and allows testing of deployable systems such as an antenna or deployable solar panels.

- ▶ **Material:** Aluminium 2025
- ▶ **Clamps material:** PA/PEEK
- ▶ **Surface:** Anodized/Alodine 1200
- ▶ **Lite version available**

**Mass:** 1,170 kg  
**Size:** 220×220×87 mm



### HORIZONTAL SUPPORT JIG

Horizontal Support Jig provides means to secure the CubeSat during most of the assembly processes and is also useful for electrical verification and functional testing.

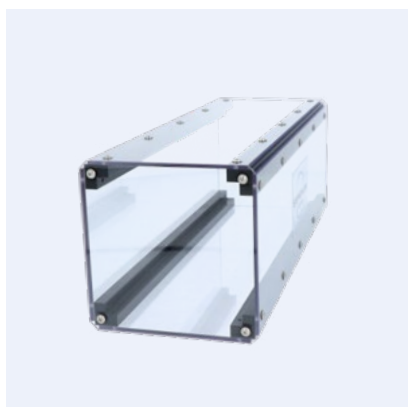
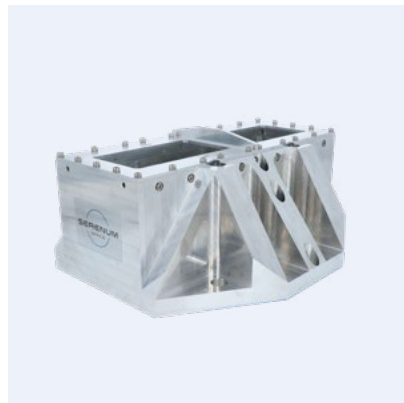
- ▶ **Material:** Aluminium 2025
- ▶ **Clamps material:** PA/PEEK
- ▶ **Surface:** Anodized/Alodine 1200

## CUBESAT VIBRATION JIG

CubeSat Vibration Jig or Test Pod is designed for qualification vibration campaign of CubeSat, commonly required during a pre-launch campaign. It is designed to guarantee maximum rigidity while maintaining minimum mass to be compatible with common shakers in test facilities. CubeSat vibration jig is suitable for Resonance search, Quasistatic, Sinus, Random, and Shock qualification campaign.

- ▶ 1U, 2U, 3U, 6U, and 8U variations available
- ▶ Compatible with latest CubeSat standards
- ▶ Internal volume extended by 10 mm on each side, to allow for deployable systems
- ▶ **Material:** Aluminium 7075
- ▶ **Surface:** no treatment or anodized
- ▶ **3U Properties**

Mass: 15,40 kg | Size: 362,5×324,5×142 mm



## CUBESAT TRANSPORT BOX

The minimalistic dimensions of the box allow to accommodate different transport needs during the development and pre-launch. The cases are constructed as dust-tight and are fully transparent from all sides.

- ▶ 1U, 2U, 3U, and 6U variations available
- ▶ compatible with the latest CubeSat standards
- ▶ Internal volume extended by 10 mm on each side, to allow for deployable systems
- ▶ **Material:** PMMA
- ▶ **Clamps material:** PA
- ▶ **3U Properties**

Mass: 1,110 kg | Size: 350,5×128 x 128 mm

## CUBESAT DISPLAY CASE

CubeSat Display Case is a transparent cylinder-shaped cabinet with aluminium baseplate. It is designed to display a CubeSat, spacecraft, or instrumentation for presentation or storage. The showcase is dust-tight, and it provides enough additional space for the placement of deployable elements of the CubeSat. Locking screws and weight distribution ensure safe vertical mounting position, securing both the spacecraft to the stand, as well as the Display Case to a table or a cabinet.

- ▶ 1U, 2U, and 3U variations available
- ▶ Various colour options for Baseplate (aluminium anodizing)
- ▶ Alodine coated Baseplate option
- ▶ **Material:** Aluminium 7075 , Case – PMMA, Clamps – PA
- ▶ **Surface:** Anodized/Alodine 1200
- ▶ **3U Properties**

Mass: 7,200 kg | Size: 514×840×480 mm



## CUBESAT MASS DUMMY

CubeSat mass dummies are typically required by a launch provider. Dummy has to accurately represent the size, mass, and weight distribution of the actual spacecraft. Further, it can support system-level vibration testing, and depending on contract terms, the mass dummy may also serve as a spacecraft replacement in the event the customer cannot deliver the spacecraft in time for launch. 1U, 2U, 3U, 6U, and 8U variant available.

- ▶ Customizable weight distribution
- ▶ **Material:** Aluminium 6082
- ▶ **Surface:** no treatment /Alodine 1200
- ▶ **3U Properties**

Mass: 2,880 kg | Size: 341×100×100 mm