



## **DATASHEET**

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EnduroSat JIG - Ground Support Equipment

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# JIG – GROUND SUPPORT EQUIPMENT DATASHEET

This user manual details the applications, features and operation of the EnduroSat JIG .  
Please read carefully the manual before unpacking the elements to ensure safe and proper use.

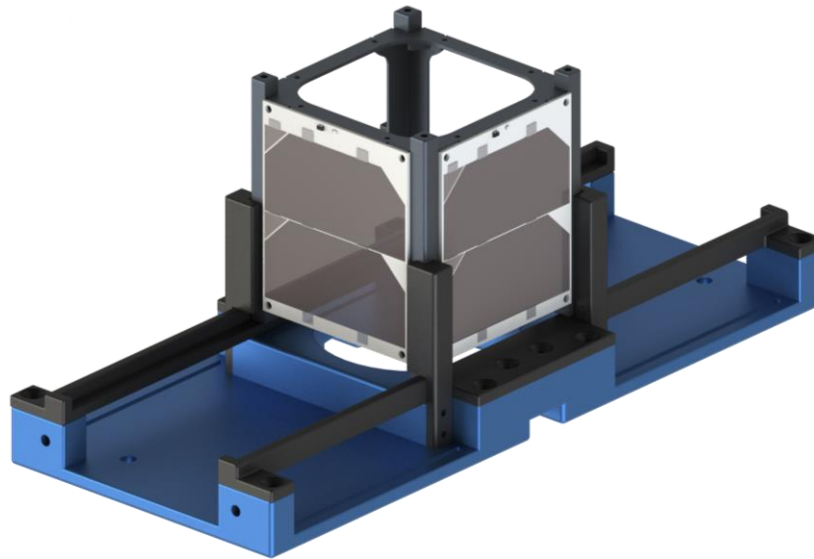


Figure 1 – EnduroSat JIG

## 1 CHANGE LOG

| Date       | Version | Note                     |
|------------|---------|--------------------------|
| 24/11/2017 | Rev 1   | Initial version.         |
| 11/06/2017 | Rev 1.2 | Plastic material updated |
| 19/09/2018 | Rev 1.3 | Text modification        |

## 2 OVERVIEW

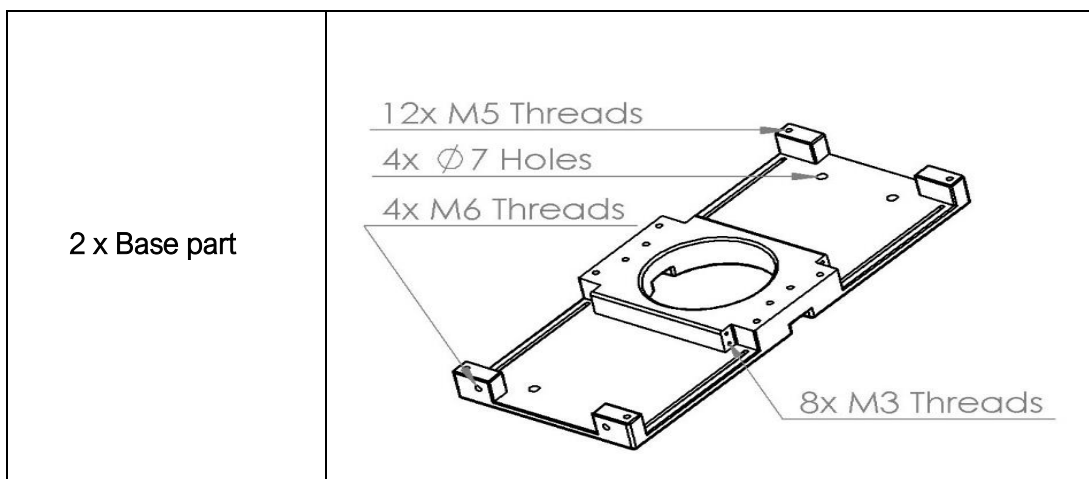
The EnduroSat JIG is designed to serve as a mechanical support for the easy and safe assembly of 1U, 1.5U, 2U and 3U CubeSats, and also as a protective case. When assembling a CubeSat, then the JIG can be configured for a vertical satellite assembly or a horizontal satellite assembly. One EnduroSat JIG also contains enough parts to assemble two CubeSats simultaneously. The EnduroSat JIG can also be configured as a protective case for the storage and transportation of a CubeSat.

## 3 HIGHLIGHTED FEATURES

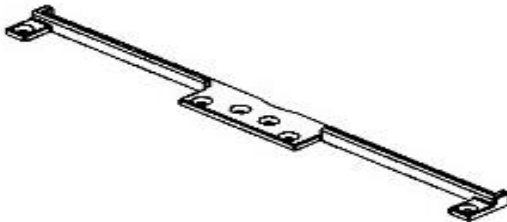
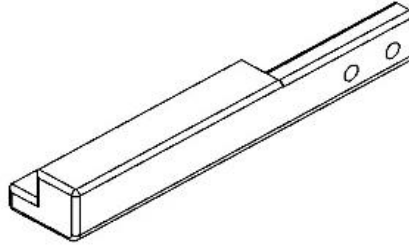
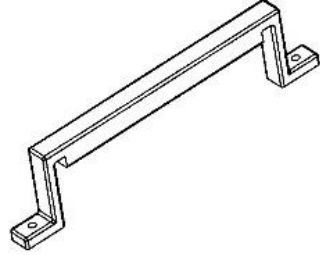
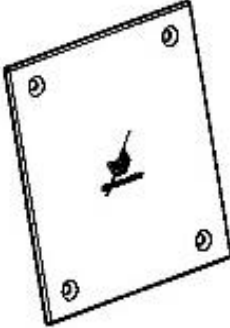
- Dimensions: 351.5x150x40 mm
- Material: Aluminum 6061 and Polyacetal POM (black)
- Three different configurations offering an assembly base for all 1U to 3U CubeSats
- ESD ports
- Weight: 4010 g

## 4 COMPONENT PARTS

The EnduroSat JIG is made up of five modular component parts. This design approach allows you to use the same parts for different configurations. For instance, the JIG can be configured for assembling a CubeSat, but it can also be configured to serve as a protective case for storage and transportation of a CubeSat. An EnduroSat JIG comes with the following parts:



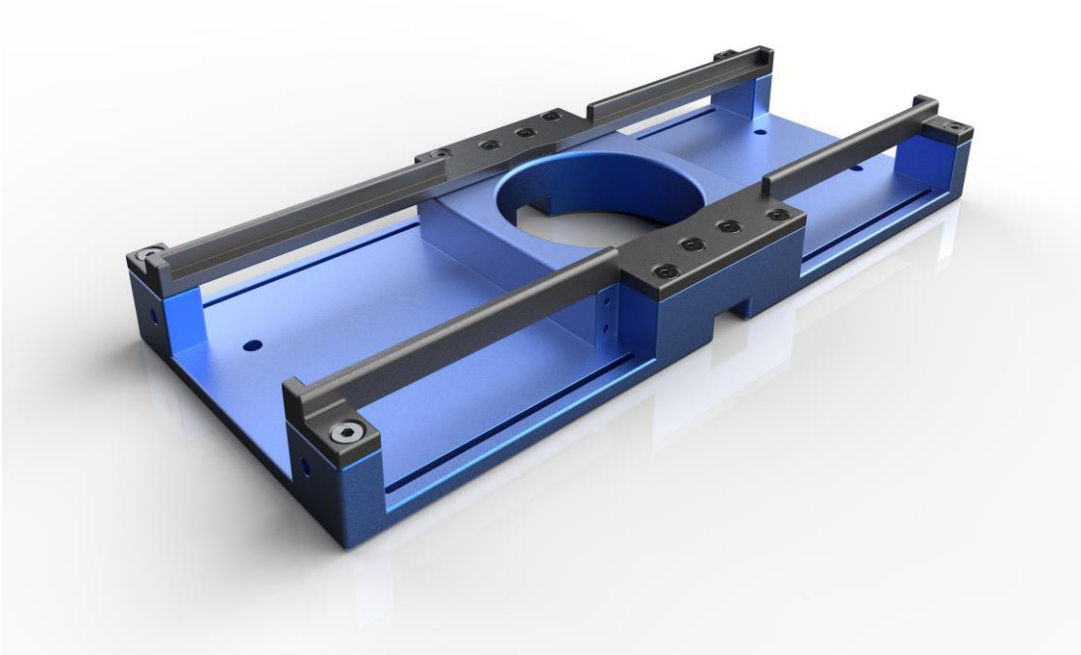
# ENDUROSAT JIG – DATASHEET

|                             |  |
|-----------------------------|--|
| <p>4 x Horizontal rails</p> |    |
| <p>8 x Vertical rails</p>   |   |
| <p>4x Lock parts</p>        |  |
| <p>2 x Lateral parts</p>    |  |

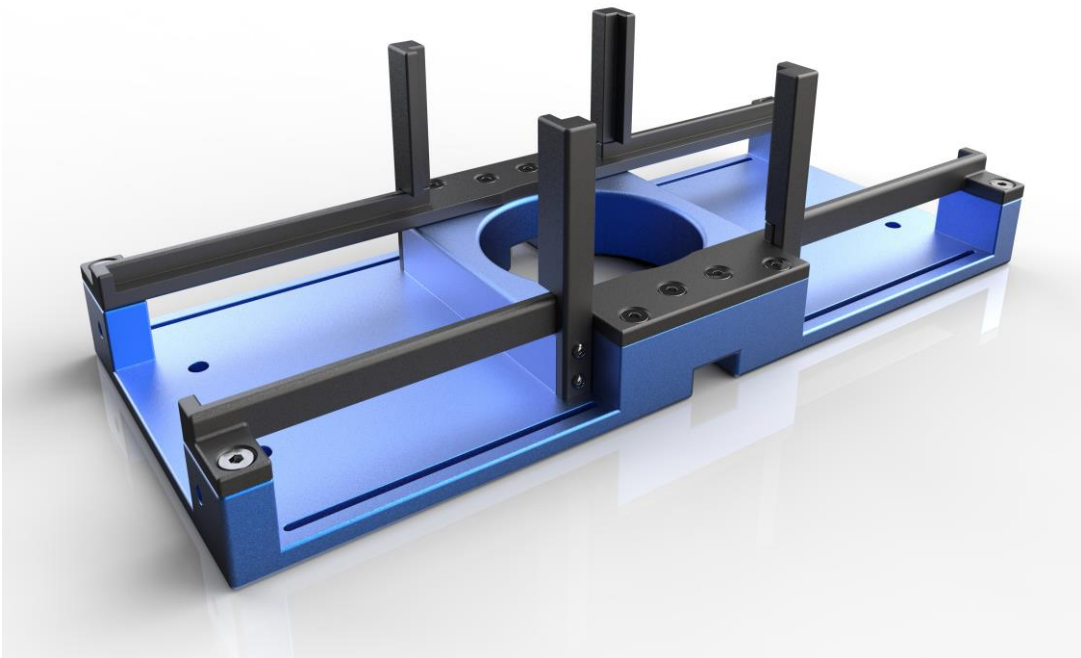
## 5 CONFIGURATIONS

The EnduroSat JIG is available in three configurations.

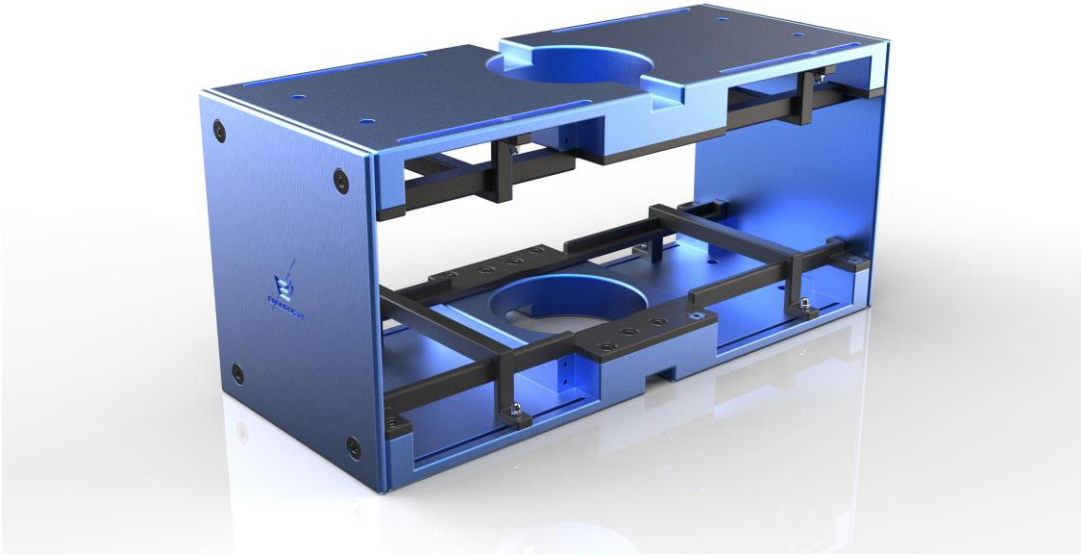
- Vertical Satellite Assembly



- Horizontal Satellite Assembly



- Protective Case for Storage & Transportation



## 6 MECHANICAL DRAWING

The following drawings show the dimensions of the JIG where the CubeSat is to be assembled. All dimensions are in mm.

### 6.1 Vertical Assembly Configuration

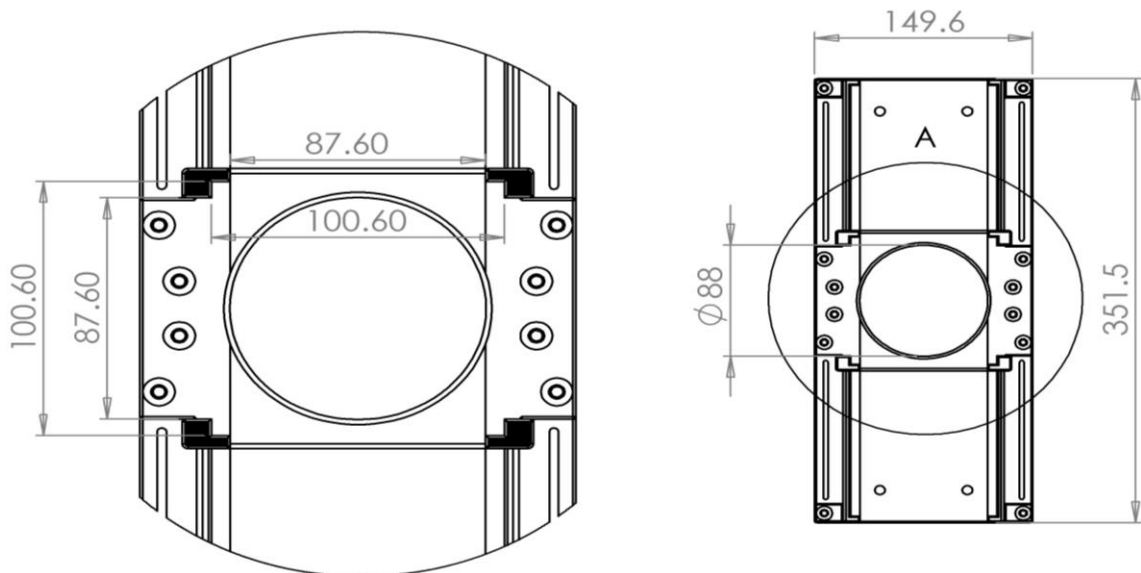


Figure 2 – Vertical assembly place for integration

6.2 Horizontal Assembly Configuration

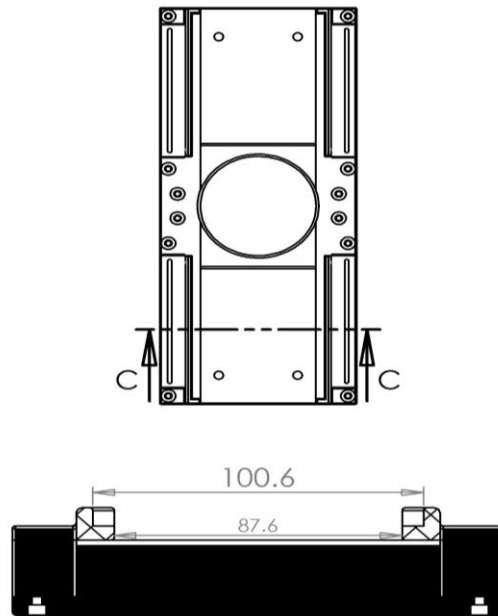


Figure 3 – Horizontal assembly place for integration

6.3 Protective Case Configuration (for Storage and Transportation)

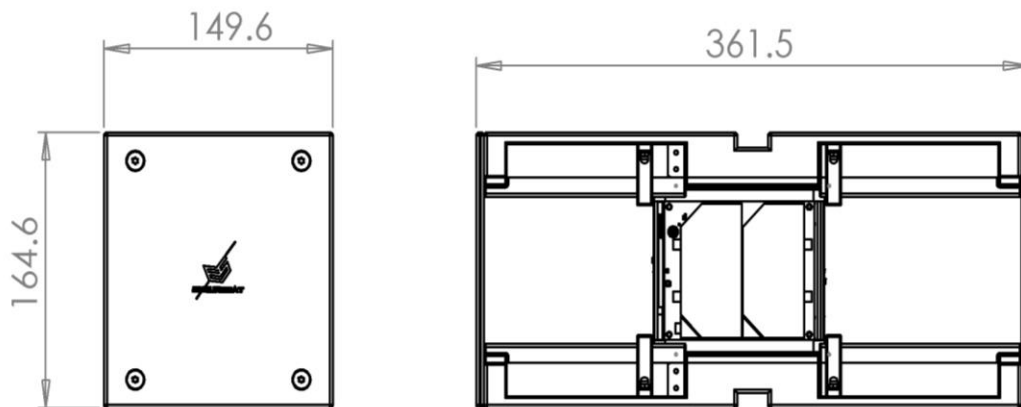


Figure 4 – CubeSat Case & Transportation



## 7 MATERIALS

The metal parts of the EnduroSat JIG are made of Aluminum 6061. They are hard blue anodized with a pearl finish.

The parts which are in contact with the satellite are all plastic. They are made from high friction resistive polyacetal POM. This material will not scratch your CubeSat's parts or structure.

## 8 HANDLING AND STORAGE

Particular attention shall be paid to the avoidance of damage to the parts of the structure during handling, storage and preservation. The handling of the parts and structure should be performed in compliance with the following instructions:

- Handle using PVC, latex, cotton (lint free) or nylon gloves.
- Store in such a manner as to preclude stress and prevent damage.