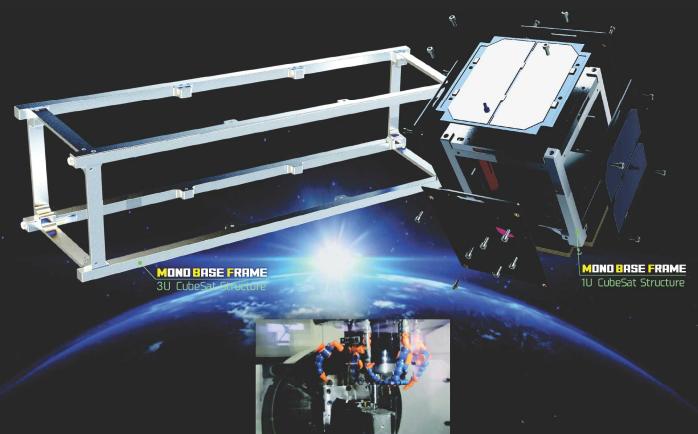
## NextGen CubeSat STRUCTURES



# Machining Professional

We create new and cutting-edge products that are out of this world.



### **Make Your Ideas** Come True!

The great ideas that you have come up with! Have you given up on the ideas, not knowing solutions for technical issues or machining methods?



## Simplify And Streamline Your Structure!

CubeSat structure containing many parts, which is difficult to assemble and adjust.....Don't you want to make it simpler?



### **Identify** Your Needs!

Do you have trouble finding the right one, while looking for brackets to fix a circuit board or a camera?





# Provide Dependable And Efficient Service!

Time-wasted meetings, complicated design, long lead time and low quality.....Do you have any outsourcing problems?



Our Semi Customizable Order Systems Solve Your Structure Problems!



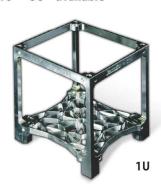
### Our MBF will open doors to a new age for CubeSat manufacturing.

## MBF MIND BRISE FRAME Cube Sat frame machined from a single aluminum block

#### **New CubeSat Frame**

#### MBF-CUBE-1U

- Dimensions :100\*100\*113.5mm
- Weight :100g~
- Material :Aluminum
- Method :Machined from a single aluminum block.
- Ishitoshi's original design
- 1U ∼ 3U available

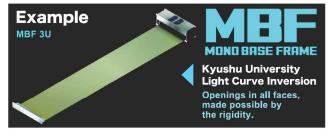




# You can choose either a fully customizable or semi-customizable MBF to fit your needs.

We accept a fully customizable order of one MBF, where the product is designed from scratch.

If your priority is to reduce the costs, we recommend that you begin with a semi customizable order. We would normally supply the MBF complete with side panels for a semi customizable order. We can attach brackets to fix circuit boards or cameras by machining holes on the side panels, without changing the basic structure of the standard MBF.



#### Here's why you should use the MBF.





Ishitoshi Machining has developed a structure for the CubeSat technology: the "MBF-Mono Base Frame" The MBF is machined from a single aluminum block, creating a fully integrated, jointless structure. There are a number of reasons we machine from a single block.



- Does it make it lighter?
- Is it more rigid?
- Is it easier to customize?







#### Yes to all, but none of them is the biggest reason.

The greatest advantage of the "MBF" being machined from a single block of aluminum is that accuracy is maintained regardless of who assembles it, allowing greater focus to be devoted to the design of the device rather than be consumed by the task of designing the structure, enhancing the likelihood of mission success.

## With the MBF, you will no longer need to make structural adjustments.

The MBF's external dimensions comply with the specifications defined in all existing Satellite Orbital Deployers. There is no need to make adjustments during installation, and similarly accurate results will be obtained regardless of the individual carrying out the installation.

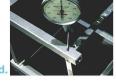
satellite specialist.



The MBF can reduce the total number of bolted joints, where you will not have to worry about bolts becoming loose as a result of vibration during launch. It is important to note that anyone can achieve stable accuracy, as no adjustment is required. Assembly personnel will require less training than a

Accuracy of the external dimensions is to within 0.1 mm.

No difficult and troublesome adjustments needed





## Preparing for CubeSat mass production!

If you were hand-building a single CubeSat and encountered a problem, of course you could rectify it. But could you assure consistent quality where the same modification had to be made in dozens of CubeSats?

In the near future, we will have to meet the demand for the CubeSat with mass production. When faced with this requirement for increased efficiency and productivity the automobile industry replaced the ladder frame chassis with the monocoque body. In much the same way, we will innovate and improve our manufacturing processes to achieve the required productivity. Why don't you become a pioneer and join us in this adventure by using our MBF.



We welcome enquiries for prototypes, joint development of original frame designs and the development of other general purpose structures.



Please do not hesitate to contact us regarding the development of CubeSat designs and other multipurpose structural products.

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