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Space Technology
Structures and Mechanisms



**No bouncing of the
CubeSat inside the PSL**

PATENTED

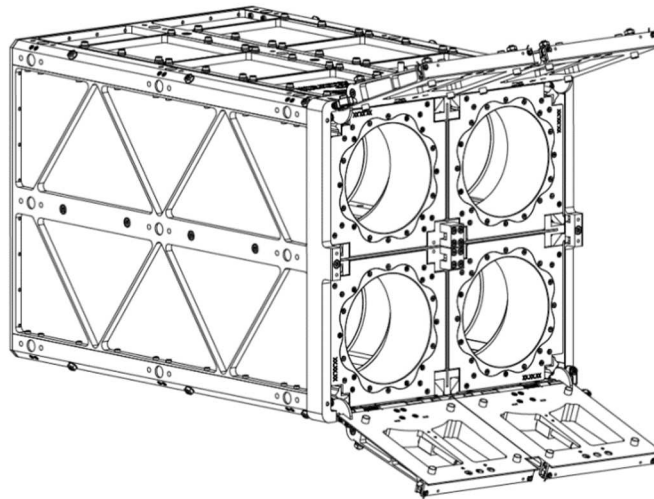
**CubeSat release after
open door locking**

PSL-P
PicoSatellite
Launch Pack

PSL-P is a **Multi-Deployment Mechanism** for CubeSats:

- **Flight proven Deployer for 1U to 12U CubeSats and combinations**
- **Non-explosive lock and release mechanisms**
- **Very low power consumption mechanism**
- **User friendly system that is easily resettable**
- **Redundancy in actuation and deployment confirmation signal**
- **Fixation of the CubeSat in X, Y and Z during launch (patented)**
- Closed envelope for high safety
- Defined deployment energy and low spin rate
- Deployment is initiated when the door is completely opened and locked (patented)
- Large clearance for attachments on the CubeSat
- Access ports for maintenance on launch site
- No export restrictions
- Fully qualified technology

A gentle transport into orbit and a reliable deployment of your CubeSat relies on skilled German engineering and flight proven quality.



Parameters

Data

Performance

PSL-P can hold different CubeSat loading configurations from 12x1U to 1x12U

Max total CubeSat mass:

20 kg

PSL-P Configuration:

4 Way

3 Way

2 Way

1 Way

Mechanical

Mass ($\pm 5\%$):

8.65 kg

7.91 kg

7.03 kg

6.04 kg

Typ. deployment energy per way:

3.1 J

6.2 J

9.3 J

12.4 J

Dimensions:

closed PSL

opened PSL (*in x*)

X

290.8 mm

366.5 mm

Y

270.0 mm

270.0 mm

Z

431.0 mm

539.6 mm

Clearance around CubeSat

12 mm

Deployment

Actuating pulse:

28 ± 4 VDC / 0.3 secs

Redundant deployment (actuator and electronics)

Status signal:

End switch

Redundant signal (sensor and electronics)

General

Operation temperature range:

-30°C to $+55^{\circ}\text{C}$

Non-operation temperature range:

-35°C to $+60^{\circ}\text{C}$

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