SATLATCH

SHOCKLESS HOLD AND DEPLOYMENT MECHANISM

HIGH-PERFORMANCE MECHANISM FOR SPACE APPLICATIONS

TRL 7

- Resettable
- Progressive deployment
- Plug & play
- Shock mitigation
- Reliable
- Non explosive

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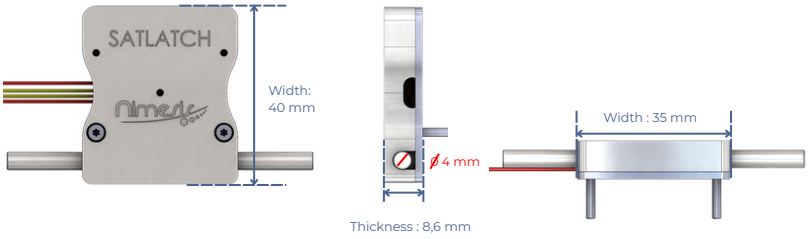
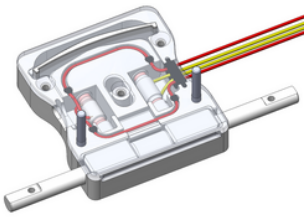
DS-SA-01.06-Nimesis SatLatch Datasheet 2025

SATLATCH provides an all-in-one solution for the holding and deployment of space structures or payloads



Automatic relocking after activation and deployment



Possibility of using 2 per hinge to double torque performance

Lockable axe in any position

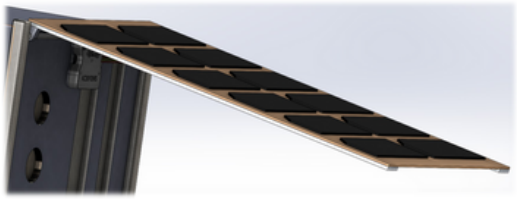
OVERVIEW

- Compatiblewitha wide range of satellites and space systems
- Shockless deployment
- No variation of size between armed and actuated position
- Operational temperature range: from -120°C to +120°C
- Auto-resettable w/o MGSE
- Progressive deployment

FEATURES

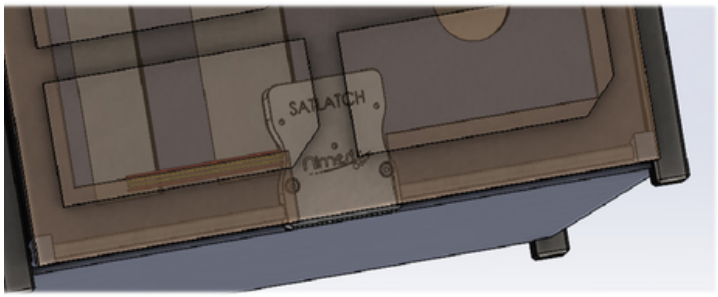
- SMAcomponent (ShapeMemoryAlloy: CuAlNi)
- Diameter of shaft: 4mm
- Max length of shaft: 300mm
- Rotation: 90° and 180° Other rotation on demand

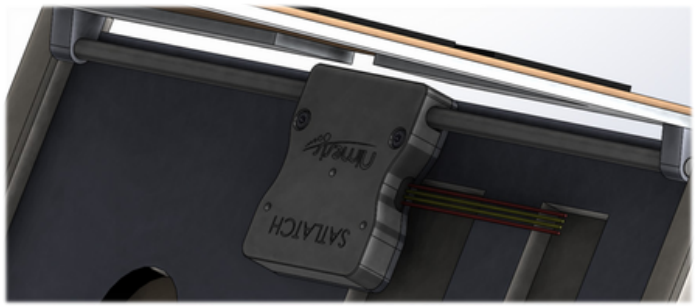
TECHNICAL DATA



SATLATCH can be mounted on the outside of the satellite
(perfectly suited for cubesats)

	Customization on demand	
Deployment / locking torque (N.m)	>0.3 N.m	
Mass of all the mechanism (g)	40 to 65g	
Resettable In Situ	Up to 10 cycles	
Operational temperature range	[-120°C ; +120°C]	
Liberation time	From 4s to 100s	
Voltage (V)	8V	16V
Voltage range (V)	7 to 8.4V	14 to 16.8V
Current (A)	0,8 to 1,4 A	0.4 to 0.7 A
Power (W)	min 5.96W max 16.5W	





Test report on demand