SPACEMIND
a brand of NPC

ARTICA

INTRODUCTION

ARTICA (Aerodynamic Reentry Technology In CubeSat Applications) is a compact deorbiting system compatible with the CubeSat format and it can be easily assembled with any structure.

The system aims at reducing orbit lifetime to be compatible with the international deorbiting regulations.

ARTICA is a drag augmentation device: atmospheric drag is exploited to force the reentry thanks to a deployable drag sail to guarantee complete destruction of the satellite when it comes in contact with the atmosphere.

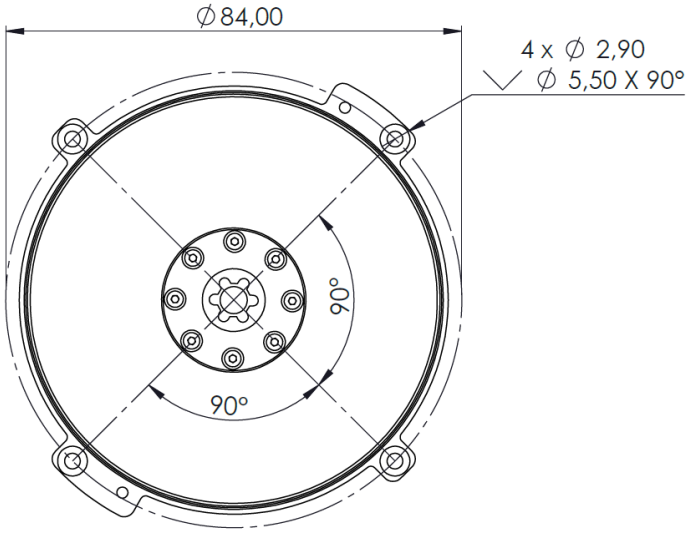
QUALITY ASSURANCE

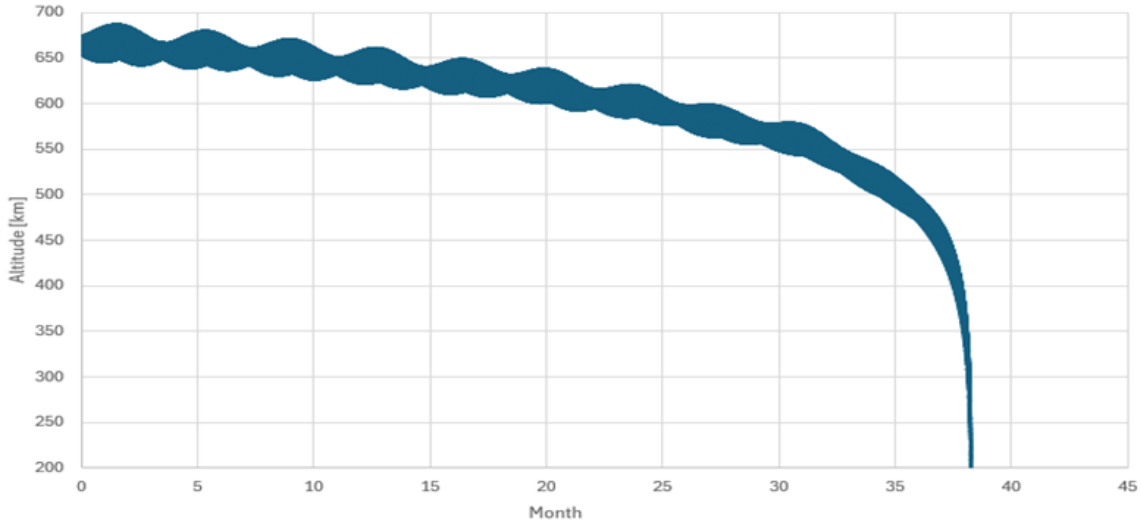
NPC is a company certified ISO9001 for Quality management system. Qualification process has been pursued for each SM Solar Panels (QT). Product Assurance protocols are applied to each delivered SM Product (AT).

Qualification Test	QT	AT
Pre-production control	✓	✓
In-take quality control	✓	✓
Acceptance quality control	✓	✓
Vibration test	✓	-
TVAC Test	✓	-
Functional and assembly test	✓	✓

TECHNICAL DATA

- Compatible with Cubesats up to 16U
- Volume: 0.35U
- PC104 Compatible
- Sail Surface: Up to 2.1 m²
- Mass: 210 g
- Surface Treatment: 30 µm Hard Anodizing
- De-Orbiting time: less than 5 years at 650km
- Adaptable mechanical interface: 4xM2.5 screws





ELECTRICAL DATA

- Connector: Micro-DSUB 9
- Voltage Bus: 3-12 V upon customization
- Power Consumption: 6 W
- Feedback Logic: NC/NO upon customization
- Redundant power line

Pin	Connection	Description
1	+Vcc Main	Main Voltage Supply
2	-	-
3	GND Main	Main Grounding
4	-	-
5 - 9	HDRM FB	HDRM Feedback Sensor
6	+Vcc Redundant	Redundant Voltage Supply
7	-	-
8	GND Redundant	Redundant Grounding