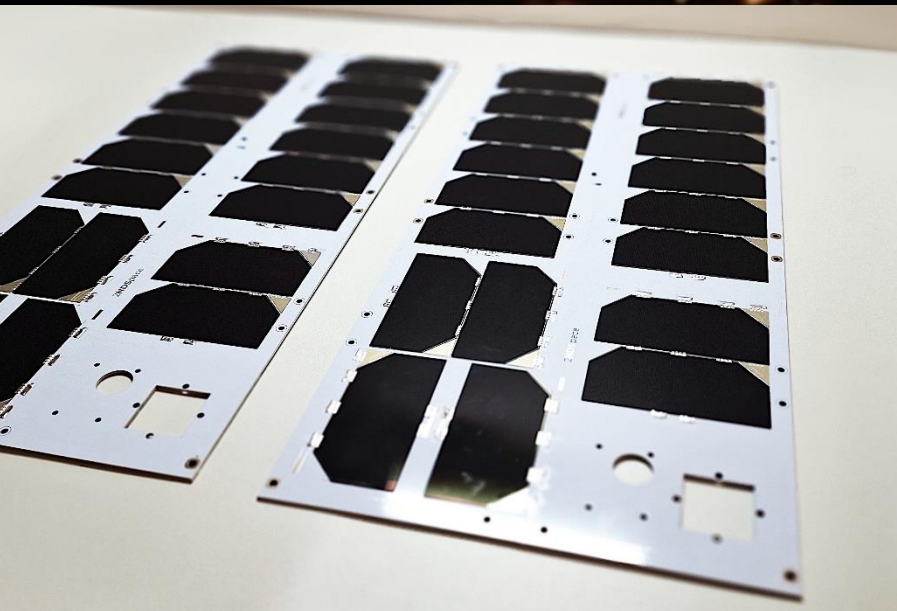


CORE Solar Panels

TRL 9

BODY MOUNTED CUBESAT SOLAR PANELS

2NDSpace body mounted solar panels derive from a decade of experience of the team in the design of space systems and successful nanosatellites missions. All 2NDSpace products are conceived to offer excellence combined with customization-as-a-standard approach and reduced lead time. CORE body mounted panels are TRL9 solution with flight heritage offering high versatility with multiple additional options such as magnetorquer, RBF and umbilical interfaces and custom cut outs. Innovative designs include ZERO-residual dipole layout and improved thermal dissipation system.



UTJ >30% efficiency solar cells

Body mounted customizable layout

Custom interfaces and umbilical connection

ZERO-Residual dipole design

Stabilized thermal dissipation architecture

RBF and embedded magnetorquer

Qualified for LEO and GEO

PRODUCT PORTFOLIO

	CORE-01Z	CORE-01	CORE-02	CORE-03	CORE-04	CORE-06Z	CORE-12	CORE-12Z	CORE-16
Peak Power [W]	2.45	2.45	4.88	8.54	11.00	4.88	19.52	9.76	24.4
OC Voltage [V]*	5.2	5.2	5.2/ 10.4	5.2/7.8/ 16.4	5.2/7.8/ 10.4 /23.4	5.2/ 10.4	10.4/ 20.8	5.2/10.4/ 20.8	10.4/ 13.0 /26.0
Suggested for	1U / 2U / 3U	2U / 3U	2U / 3U	3U / 6U	4U / 8U	6U / 8U	6U / 12U	12U / 16U	16U / 8U
Side	Top/Bottom	Lateral	Lateral	Lateral	Lateral	Top/Bottom	Lateral	Top/Bottom	Lateral
Form Factor	1x1	1x1	1x2	1x3	1x4	2x1	2x3	2x2	2x4
Mass [g]	38	35	75	118	148	91	289	195	387
Protection	Dual redundant	Dual redundant	Dual redundant	Dual redundant	Dual redundant	Dual redundant	Dual redundant	Dual redundant	Dual redundant

*Panel OC Voltage can be customized according to user requirement. Standard values are indicated in bold.

QUALIFICATION AND ACCEPTANCE TEST

	Functional/AIT	Electrical Test/Flash	Vibration test	Mechanical Shock	TVAC Test
Qualification Test	✓	✓	NASA GEVS: GSFC-STD-7000A ESA ECSS-E-ST-10-03C	NASA GEVS: GSFC-STD-7000A ESA ECSS-E-ST-10-03C	NASA GEVS: GSFC-STD-7000A ESA ECSS-E-ST-10-03C
Acceptance Test	✓	✓			



- **Reliability** and **Efficiency** to ensure consistent and dependable performance in demanding space environments.
- Fully **customizable** mounting holes and layout configurations to adapt to various satellite designs.
- Capable of supporting different voltage levels to meet specific mission requirements.
- Includes **magnetorquers**, **umbilical** connectors, remove before flight (**RBF**) interfaces, and a standard suite of sensors for seamless integration.
- Power lines are designed with **dual redundancy** to enhance reliability and ensure uninterrupted operation.
- Panels can be modularly composed to match the required form factor, providing additional design flexibility.
- Designed and manufactured to meet European Cooperation for Space Standardization (ECSS) requirements.

