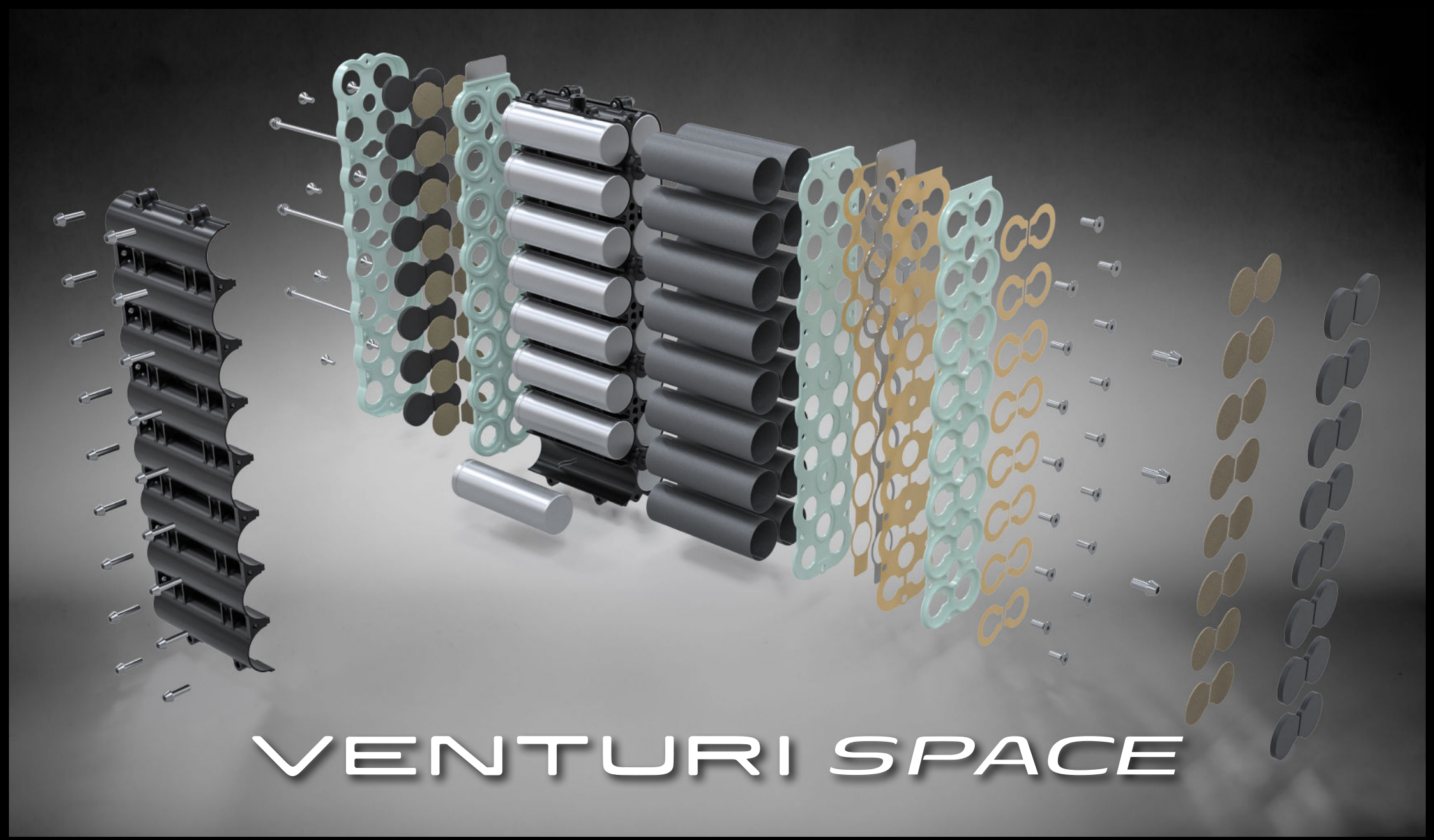


VENTURI SPACE

TECHNICAL DATASHEET

| BATTERIES |

BATTERIES

Venturi Space batteries are designed to withstand the extreme temperatures and intense solar radiation at the lunar south pole.

CELL TESTING

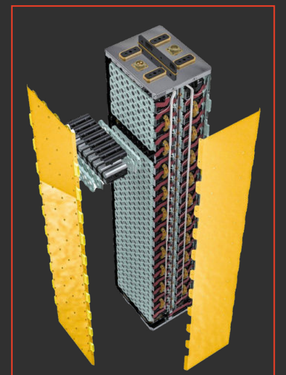
To power the rovers, Venturi Space acquires and tests cells, **90%** of them are selected.

TEMPERATURE RESISTANCE: -240°C

The battery packs are designed to withstand an external temperature variation close to 400°C (from -240°C up to +130°C).

OVERCHARGE PROTECTION: 4.2V

The cells are subjected to an overcharge test by charging them beyond the 4.2V voltage limit, at which point the charge interruption device is triggered.



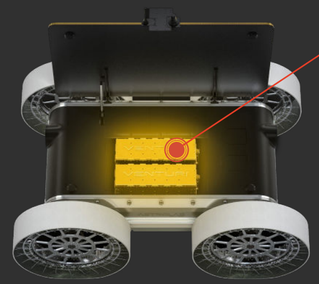
EXTERNAL SHORT CIRCUIT PROTECTION

The cells are tested to prevent thermal runaway. In the event of a short circuit, an internal protection device activates and the cell potential falls to 0V.

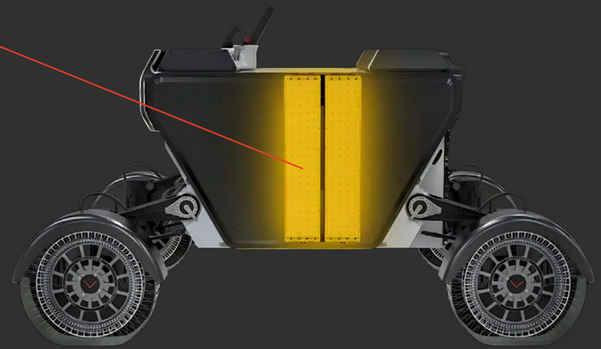
BATTERY PACKS

Each rover is equipped with several battery packs to ensure functional redundancy.

The battery design provides protection against the propagation of thermal runaway, in order to preserve its functionality.



DISCOVER LABORATORY 209



STRINGENT SELECTION, CRITICAL TESTS

CELL BY CELL

To be certified space-grade, each cell is carefully analysed and put through a series of performance and abuse tests, from the moment it is delivered to the moment it is installed in the battery pack.

CELL SELECTION STAGES

- Length and diameter measurement,
- Inspection for scratches, corrosion, deformation, or impacts,
- Weighing,
- Charge and discharge tests to determine capacity and internal resistance.

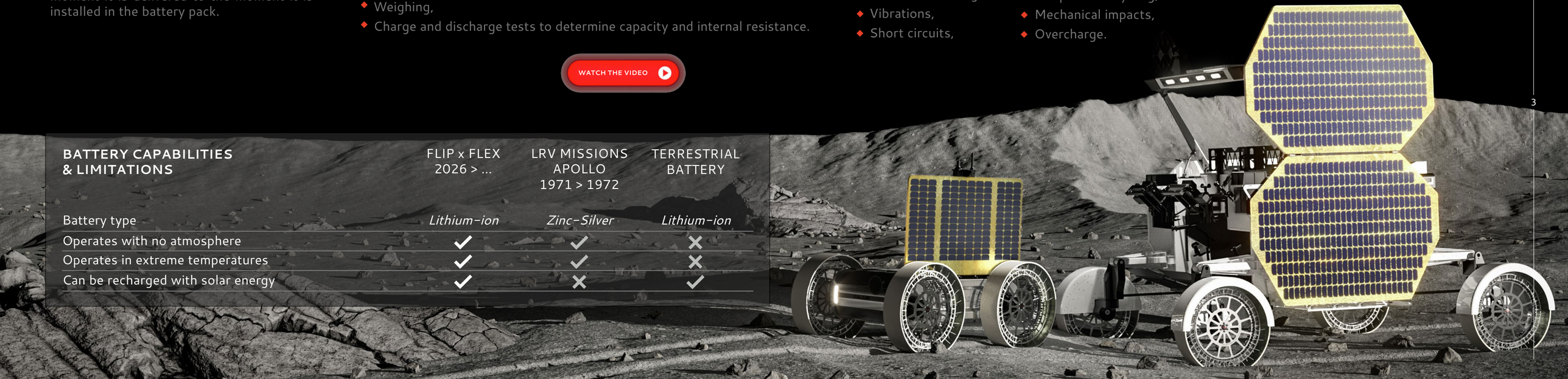
WATCH THE VIDEO

CELL TECHNOLOGY

Each cell technology is assessed through destructive testing:

- Vacuum,
- Mechanical strength,
- Vibrations,
- Short circuits,
- Thermal runaway,
- Temperature cycling,
- Mechanical impacts,
- Overcharge.

BATTERY CAPABILITIES & LIMITATIONS	FLIP x FLEX 2026 > ...	LRV MISSIONS APOLLO 1971 > 1972	TERRESTRIAL BATTERY
Battery type	*Lithium-ion*	*Zinc-Silver*	*Lithium-ion*
Operates with no atmosphere	✓	✓	✗
Operates in extreme temperatures	✓	✓	✗
Can be recharged with solar energy	✓	✗	✓



LUNAR MOBILITY BY VENTURI SPACE: EXCELLENCE TIMES INFINITY.

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