



## PRODUCT DESCRIPTION

KULR ONE 100S is an advanced battery pack that has been specifically designed for high-reliability aerospace and defense applications. With its cutting-edge design, this battery pack delivers a unique combination of safety, performance, intelligence, modularity, and reliability to meet the most demanding requirements of these critical applications.

## FEATURES AND BENEFITS

- **Safety** - Thanks to KULR Technology's Thermal Runaway Shield (TRS) technology, both KULR ONE and KULR ONE SPACE offer industry-leading passive propagation resistance (PPR), ensuring maximum safety for high-reliability aerospace and defense applications.
- **Performance** - Utilizing top-quality and high-performing 18650 cells from North American sources, this battery pack offers up to 100Wh of pack energy and fast charge and discharge capabilities, delivering exceptional performance for the most demanding applications.
- **Intelligence** - KULR ONE offers the option to integrate with KULR Technology's exclusive CellCheck digital battery safety system. By doing so, battery performance and health data can be transmitted straight to the cloud, providing the ability to track, assess and forecast the life expectancy of your application.
- **Modularity** - With a design that enables easy removal and re-use across multiple applications, KULR ONE provides a flexible, standardized battery pack solution that can be used in a wide range of devices and environments.
- **Reliability** - Designed by engineers with extensive experience in developing battery packs for manned spaceflight, KULR ONE is manufactured using the highest-quality materials and rigorously tested designs to ensure exceptional reliability and performance.
- **Customization** - With world-class battery design engineers and manufacturing capabilities, KULR Technology can customize battery packs to meet the unique needs of individual applications, including various form factors and performance characteristics, delivering unparalleled quality and reliability.

## TYPICAL APPLICATIONS

High reliability aerospace and defense applications including SmallSat and CubeSat.



## TYPICAL PROPERTIES

Feature	KULR ONE 100S
Cells	18650
Cell Count	8
Pack Configuration	2P-4S
Pack Energy	100 Wh
Pack Max Capacity	7 Ah
Pack Max Voltage	14.4 V
Maximum Rated Charge	0.5 C (1.7 A)
Sustained Discharge Rate	2.8 C (20 A)
Cycles for Max Performance (80%)	450
CellCheck	Optional
Battery Management System (BMS)	Texas Instruments (TI) BMS
Housing Construction	Aluminum 6061
Pack Mass	1.5 kg
Target Gravimetric Energy Density	180 Wh kg <sup>-1</sup>
Target x, y, z Dimensions	10 cm x 5 cm x 9 cm
JSC 20793 Rev. E Compliant	Yes

## AVAILABILITY

Please contact KULR Technology Group for additional information.

## DISCLAIMER

Data on this Technical Data Sheet (TDS) are typical values and for reference only. The information provided in this TDS, including but not limited to the recommendations for use and application of the product, are based on our knowledge and experience of the product. The product can have a variety of different applications, as well as differing working conditions and environments that are beyond our control. Factors or events that could cause actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We cannot guarantee future results, performance or achievements. Furthermore, no representations or warranties are made as to the accuracy or reasonableness of any assumptions on which the data or information is based.

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