



# SafeCASE – SLEEVE

## PRODUCT DESCRIPTION

KULR's SafeCASE - SLEEVE is a DOT permitted Passive Propagation Resistant (PPR) storage and transportation system for batteries. It is designed to mitigate thermal runaway, providing safe and sustainable storage and transportation for lithium-ion cells and battery packs that are up to 0.3 kWh per sleeve and utilizes KULR's patented <sup>3</sup>Thermal Runaway Shield™ (TRS) technology. It can be customized upon request.

## FEATURES AND BENEFITS

- DOT approved for ground transportation
- Rated Up to 0.3 kWh per sleeve
- Reusable
- Sustainable
- Safe nontoxic construction

## TYPICAL APPLICATIONS

SafeCASE - SLEEVE can be customized to fit any application within the rated energy limit but is typically used for lithium-ion cell/battery storage, transportation, and DDR/hazardous li-ion battery recovery and

## TYPICAL PROPERTIES

| PROPERTY                                       | TYPICAL VALUE        | TEST METHOD                       |
|------------------------------------------------|----------------------|-----------------------------------|
| <b>External Case</b>                           |                      |                                   |
| Color                                          | Black                | Visual                            |
| Maximum Operating Temperature                  | 900+°C               | Material Prop                     |
| <b>TRS</b>                                     |                      |                                   |
| Construction                                   | Encapsulated Coolant | N/A                               |
| Maximum Energy Rating                          | 300 Wh               | DOT Approved TR Test <sup>2</sup> |
| <sup>1</sup> Product Assembly Thickness        | 2 mm                 | Micrometer                        |
| <sup>1</sup> Tensile Strength (at break)       | >14 lbs              | ASTM D882                         |
| <sup>1</sup> Tear Strength (375F;26psi; 1 sec) | >1.7lbs              | ASTM689                           |
| Seal Strength (375F;26psi; 1 sec)              | 12 lbs/in            | ASTM D882                         |
| <sup>1</sup> Puncture Strength                 | >25 lbs              | TMS 101-C, Method A               |

<sup>1</sup>For further information see TRS Technical Data Sheet,

<sup>2</sup>DOT test performed by KULR to receive permits #21139,21167,21193,21693,21704

<sup>3</sup>U.S. Patent No. US-11018397-B, US-11502352-B2, US-10727462-B2



| PROPERTY                      | TYPICAL VALUE | TEST METHOD |
|-------------------------------|---------------|-------------|
| <b>Ablative Reinforcement</b> |               |             |
| Tensile Strength              | >80MPa        | ASTM D638   |
| Compression Strength          | >180MPa       | ASTM D695   |
| Flexural Strength             | >80MPa        | ASTM D790   |

| PRODUCT | DIMENSIONS | RATING | EMPTY WEIGHT | MAXIMUM WEIGHT | ABLATIVE REINFORCEMENT |
|---------|------------|--------|--------------|----------------|------------------------|
|---------|------------|--------|--------------|----------------|------------------------|

|                                     |               |         |        |       |     |
|-------------------------------------|---------------|---------|--------|-------|-----|
| SafeCASE – SLEEVE<br>(K-SXS-000001) | 13"W x 16.0"D | 0.3 kWh | 3.8lbs | 10lbs | Yes |
|-------------------------------------|---------------|---------|--------|-------|-----|

### AVAILABILITY

SafeCASE - SLEEVE can be engineered in custom sizes. 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.

This product is not intended for use with any products containing lithium metal. KULR Technology Group, Inc. is, therefore, not responsible, or liable for the suitability of our products for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you conduct your own prior trials to confirm such suitability of our product for your use and application and within your working conditions and environments.