

Data sheet for RESU7H



Performance

RESU7H

| Total Energy Capacity1)7 kWh @25°C (77°F), 100% SOEUsable Energy Capacity1)6.6kWhBattery Capacity63 AhVoltage RangeCharge Discharge400 to 450 VDCAbsolute Max. Voltage520 VDCMax. Charge/Discharge Current8.5A@420V / 10A@350VMax. Charge/Discharge Power ²⁾ 3.5kWPeak Power ³⁾ (only discharging)5kW for 5 sec.Peak Power ³⁾ (only discharging)5kW for 5 sec.Peak Current (only discharging)5kW for 5 sec.Peak Current (only discharging)13.5A@370V for 5sec.Communication InterfaceRS485DC DisconnectCircuit BreakerConnection MethodSpring Type ConnectorUser interfaceLEDs for Normal and Fault operationOperating ConditionsInstallation LocationInstallation LocationIndoor(Wall-Mounted) / OutdoorOperating Temperature59 to 86°F (15 to 30°C)Storage Temperature22 to 131°F (-30 to 55°C)Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionMatural ConvectionEnergen CurrentionEnsistonsFCCHazardous Materials ClassificationClass 9TransportationUN38.3Ingress RatingIP55 | Electrical Characteristics | | | |
|--|---|--------------|-------------------------------------|--|
| Battery Capacity 63 Ah Voltage Range Charge Discharge 400 to 450 VDC Absolute Max. Voltage 520VDC Max. Charge/Discharge Current 8.5A@420V / 10A@350V Max. Charge/Discharge Power ²⁾ 3.5kW Peak Power ³⁾ (only discharging) 5kW for 5 sec. Peak Current (only discharging) 13.5A@370V for 5sec. Communication Interface RS485 DC Disconnect Circuit Breaker Connection Method Spring Type Connector User interface LEDs for Normal and Fault operation Operating Conditions Installation Location Indoor(Wall-Mounted) / Outdoor Operating Temperature (Recommended) 59 to 86°F (15 to 30°C) Storage Temperature (Recommended) 59 to 86°F (15 to 30°C) Storage Temperature (Recommended) 59 to 86°F (15 to 30°C) Humidity 5% to 95% Altitude Max. 6,562ft (2,000m) Cooling Strategy Natural Convection Cell Battery Pack CE / RCM / TUV (IEC 62619) Emissions FCC Hazardous Materials Classification Class 9 | Total Energy Capacity ¹⁾ | | 7 kWh @25°C (77°F), 100% SOE | |
| NumberCharge Discharge400 to 450 VDC 350 to 430 VDCAbsolute Max. Voltage520VDCMax. Charge/Discharge Current8.5A@420V / 10A@350VMax. Charge/Discharge Power2)3.5kWPeak Power3) (only discharging)5kW for 5 sec.Peak Current (only discharging)13.5A@370V for 5sec.Communication InterfaceRS485DC DisconnectCircuit BreakerConnection MethodSpring Type ConnectorUser interfaceLEDs for Normal and Fault operationOperating ConditionsInstallation LocationInstallation LocationIndoor(Wall-Mounted) / OutdoorOperating Temperature14 to 113°F (-10 to 45°C)Operating Temperature59 to 86°F (15 to 30°C)Storage Temperature-22 to 131°F (-30 to 55°C)Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionSafetyCellUL1642SafetyCellHazardous Materials ClassificationClass 9TransportationUN38.3 | Usable Energy Capacity ¹⁾ | | 6.6kWh | |
| Voltage RangeDischarge350 to 430 VDCAbsolute Max. VoltageDischarge520VDCMax. Charge/Discharge Current $8.5A@420V / 10A@350V$ Max. Charge/Discharge Power ²⁾ $3.5kW$ Peak Power ³⁾ (only discharging) $5kW$ for 5 sec.Peak Current (only discharging) $13.5A@370V$ for 5sec.Communication InterfaceRS485DC DisconnectCircuit BreakerConnection MethodSpring Type ConnectorUser interfaceLEDs for Normal and Fault operationOperating ConditionsInstallation LocationInstallation LocationIndoor(Wall-Mounted) / OutdoorOperating Temperature14 to 113°F (-10 to 45°C)Operating Temperature (Recommended)59 to 86°F (15 to 30°C)Storage Temperature-22 to 131°F (-30 to 55°C)Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionDischarge CellUL1642SafetyCellUL1642Battery PackSafetyFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | Battery Capacity | | 63 Ah | |
| Absolute Max. Voltage350 to 430 VDCAbsolute Max. Voltage Current8.5A@420V / 10A@350VMax. Charge/Discharge Power ²⁾ 3.5kWPeak Power ³⁾ (only discharging)5kW for 5 sec.Peak Current (only discharging)13.5A@370V for 5sec.Communication InterfaceRS485DC DisconnectCircuit BreakerConnection MethodSpring Type ConnectorUser interfaceLEDs for Normal and Fault operationOperating ConditionsInstallation LocationIndoor(Wall-Mounted) / OutdoorOperating Temperature (Recommended)59 to 86°F (15 to 30°C)Storage Temperature (Recommended)59 to 86°F (15 to 30°C)Storage Temperature (Recommended)59 to 86°F (15 to 30°C)AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionCertificationCellMax. 6,562ft (2,000m)Consisting Temperature (Cell UL1642SafetyCellUL1642SafetyCell StrategyImissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | | Charge | 400 to 450 VDC | |
| Max. Charge/Discharge Current $8.5A@420V / 10A@350V$ Max. Charge/Discharge Power ²⁾ $3.5kW$ Peak Power ³⁾ (only discharging) $5kW$ for 5 sec.Peak Current (only discharging) $13.5A@370V$ for 5sec.Communication InterfaceRS485DC DisconnectCircuit BreakerConnection MethodSpring Type ConnectorUser interfaceLEDs for Normal and Fault operationOperating ConditionsIndoor(Wall-Mounted) / OutdoorOperating Temperature14 to 113°F (-10 to 45°C)Operating Temperature (Recommended)59 to 86°F (15 to 30°C)Storage Temperature (Recommended)59 to 86°F (15 to 55°C)Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionCertificationCellBattery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | voltage Kange | Discharge | 350 to 430 VDC | |
| Max. Charge/Discharge Power23.5kWPeak Power3(only discharging)5kW for 5 sec.Peak Current (only discharging)13.5A@370V for 5sec.Communication InterfaceRS485DC DisconnectCircuit BreakerConnection MethodSpring Type ConnectorUser interfaceLEDs for Normal and Fault operationOperating ConditionsInstallation LocationInstallation LocationIndoor(Wall-Mounted) / OutdoorOperating Temperature (Recommended)59 to 86°F (15 to 30°C)Storage Temperature (Recommended)59 to 86°F (15 to 30°C)Storage Temperature-22 to 131°F (-30 to 55°C)Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionCertificationCellSafetyCellBattery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | Absolute Max. Voltage | | 520VDC | |
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| $\begin{array}{c c c c c } Communication Interface & RS485 \\ \hline DC Disconnect & Circuit Breaker \\ \hline Connection Method & Spring Type Connector \\ \hline User interface & LEDs for Normal and Fault operation \\ \hline \hline \\ \hline $ | Peak Power ³⁾ (only discharging) | | 5kW for 5 sec. | |
| $\begin{array}{c c c c c } DC \ Disconnect & Circuit \ Breaker \\ Connection \ Method & Spring \ Type \ Connector \\ User interface & LEDs \ for \ Normal \ and \ Fault \ operation \\ \hline \\ $ | Peak Current (only discharging) | | 13.5A@370V for 5sec. | |
| $\begin{array}{c c c c c c } \mbox{Connection Method} & Spring Type Connector \\ \hline User interface & LEDs for Normal and Fault operation \\ \hline \\ $ | Communication Interface | | RS485 | |
| LEDs for Normal and Fault operationUser interfaceLEDs for Normal and Fault operationOperating ConditionsInstallation LocationIndoor(Wall-Mounted) / OutdoorOperating Temperature14 to $113^{\circ}F$ (-10 to $45^{\circ}C$)Operating Temperature (Recommended)59 to $86^{\circ}F$ (15 to $30^{\circ}C$)Storage Temperature-22 to $131^{\circ}F$ (-30 to $55^{\circ}C$)Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionCertificationCellUL1642SafetyCellUL1642Battery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9Transportation | DC Disconnect | | Circuit Breaker | |
| The rest of the rest o | Connection Method | | Spring Type Connector | |
| $\begin{tabular}{ c c c c } \hline Indoor(Wall-Mounted) / Outdoor \\ \hline Operating Temperature & 14 to 113°F (-10 to 45°C) \\ \hline Operating Temperature (Recommended) & 59 to 86°F (15 to 30°C) \\ \hline Storage Temperature & -22 to 131°F (-30 to 55°C) \\ \hline Humidity & 5% to 95% \\ \hline Altitude & Max. 6,562ft (2,000m) \\ \hline Cooling Strategy & Natural Convection \\ \hline $ | User interface | | LEDs for Normal and Fault operation | |
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| $\begin{array}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c } \hline \hline \begi$ | Operating Conditions | | | |
| $\begin{array}{c c c c c c } \hline Operating Temperature (Recommended) & 59 to 86°F (15 to 30°C) \\ \hline Storage Temperature & -22 to 131°F (-30 to 55°C) \\ \hline Humidity & 5% to 95\% \\ \hline Altitude & Max. 6,562ft (2,000m) \\ \hline Cooling Strategy & Natural Convection \\ \hline \hline \\ \hline $ | Installation Location | | Indoor(Wall-Mounted) / Outdoor | |
| $\begin{array}{c c c c c c } Storage Temperature & -22 to 131°F (-30 to 55°C) \\ \hline Humidity & 5% to 95\% \\ \hline Altitude & Max. 6,562ft (2,000m) \\ \hline Cooling Strategy & Natural Convection \\ \hline \hline Certification & & & \\ \hline \hline Certification & & & \\ \hline Safety & Cell & UL1642 \\ \hline Battery Pack & CE / RCM / TUV (IEC 62619) \\ \hline Emissions & FCC \\ \hline Hazardous Materials Classification & Class 9 \\ \hline Transportation & UN38.3 \\ \hline \end{array}$ | Operating Temperature | | 14 to 113°F (-10 to 45°C) | |
| Humidity5% to 95%AltitudeMax. 6,562ft (2,000m)Cooling StrategyNatural ConvectionCertification $\end{tabular}$ CertificationSafetyCellBattery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | Operating Temperature (Recommended) | | 59 to 86°F (15 to 30°C) | |
| Altitude Max. 6,562ft (2,000m) Cooling Strategy Natural Convection Certification Cell Safety Cell Battery Pack CE / RCM / TUV (IEC 62619) Emissions FCC Hazardous Materials Classification Class 9 Transportation UN38.3 | Storage Temperature | | -22 to 131°F (-30 to 55°C) | |
| Cooling Strategy Natural Convection Certification Safety Cell UL1642 Battery Pack CE / RCM / TUV (IEC 62619) Emissions FCC Hazardous Materials Classification Class 9 Transportation UN38.3 | Humidity | | 5% to 95% | |
| Certification Safety Cell UL1642 Battery Pack CE / RCM / TUV (IEC 62619) Emissions FCC Hazardous Materials Classification Class 9 Transportation UN38.3 | Altitude | | Max. 6,562ft (2,000m) | |
| CellUL1642SafetyBattery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | Cooling Strategy | | Natural Convection | |
| CellUL1642SafetyBattery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | | | | |
| SafetyBattery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | | | | |
| Battery PackCE / RCM / TUV (IEC 62619)EmissionsFCCHazardous Materials ClassificationClass 9TransportationUN38.3 | Safety | | | |
| Hazardous Materials ClassificationClass 9TransportationUN38.3 | Surcey | Battery Pack | CE / RCM / TUV (IEC 62619) | |
| Transportation UN38.3 | | | | |
| I | | | Class 9 | |
| Ingress Rating IP55 | Transportation | | UN38.3 | |
| | Ingress Rating | | IP55 | |

% Test Conditions - Temperature 25°C, at the beginning of life.

1) Battery Cell Only energy capacity at Depth of Discharge 95%.

2) LG Chem recommends 2.1kW for maximizing battery lifetime.

3) Peak Current excludes repeated short duration(less than 5 sec. of current pattern).