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# TECHNICAL SHEET
# RACKMOUNT 3U
# 51.2 V 100 Ah
# Self-heating




Volthium Energy inc. | T. 514.989.9586 | info@volthium.com | www.volthium.com

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Before using your Volthium battery, please read the user manual and the datasheet specific to your battery.
You can find these documents by clicking on the following link: https://volthium.com/en/documents/
Any improper use of the product may void its warranty.
For any additional questions, please contact Volthium technical support.

| ELECTRICAL SPECIFICATIONS | |
|---|---|
| Voltage | 51.2 volt |
| Capacity | 100 Ah |
| Capacity @ 20A | 300 min |
| Energy | 5120 Wh |
| Self-discharge | < 3% per month |
| Maximum unit in series | Contact us |
| Maximum unit in parallel | 48~65 (300 units with SmartBridge) |

| CHARGE SPECIFICATIONS | |
|---|---|
| Recommended charge current | 70 A |
| Maximum charge current | 100 A |
| Recommended charge voltage | 56 V (Bulk) \| 54.6 V (Float) |

| DISCHARGE SPECIFICATIONS | |
|---|---|
| Continuous discharge current | 100 A |
| BMS – Reconnection voltage | 43.2 V ~ 45 V |
| BMS – Discharge reconnection voltage | 52 V |
| Short circuit protection | Electronic protection by BMS,<br>125A DC circuit breaker, CSA UL1077 |

| TEMPERATURE SPECIFICATIONS | |
|---|---|
| Discharge temperature | From -20 to 65°C |
| Charging temperature | From 0 to 45°C |
| Self-heating system activation temperature range | From -25 to 5°C |

| STORAGE SPECIFICATIONS | |
|---|---|
| Storage temperature | From -20 to 45°C |
| Storage voltage | From 52.4 V to 53.6 V |

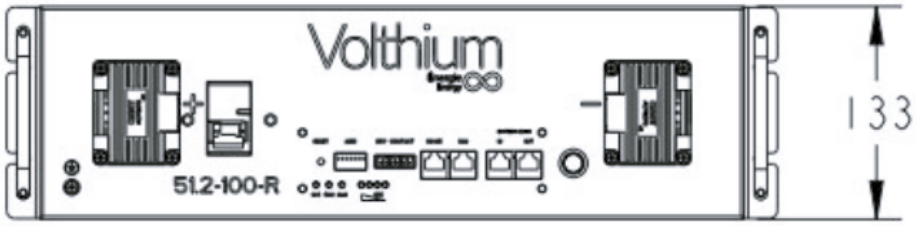
| COMMUNICATIONS SPECIFICATIONS | |
|---|---|
| Bluetooth | No |
| Communication ports | Dry Contact (Pre-Alarm + RSD) \| RS485 Modbus \| CAN |
| LCD screen | No |
| Compatible protocols | Victron CAN \| Sol-Ark / DEYE \| LuxPowerTek \| Schneider \| SRNE \| Pylontech \| LoRaWAN \| SMA \| Customization and tailor-made design |

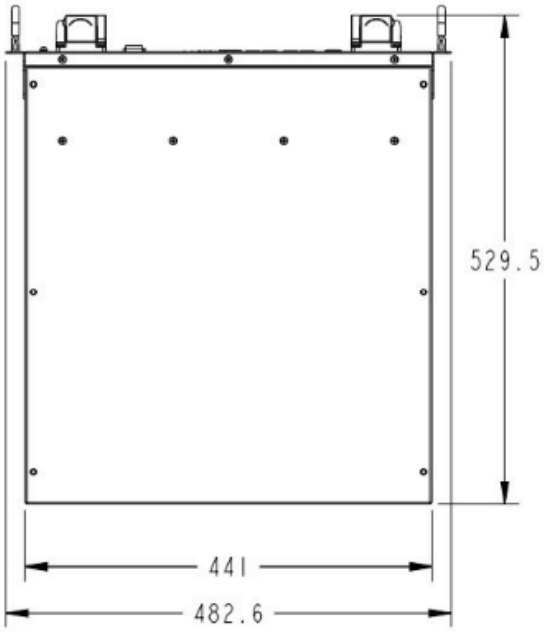
| SELF-HEATING SYSTEM SPECIFICATIONS | |
|---|---|
| Self-heating system activation temperature range | From -25 to 5°C |
| Activation current | 5 A |
| Continuous heating current | 4 A |

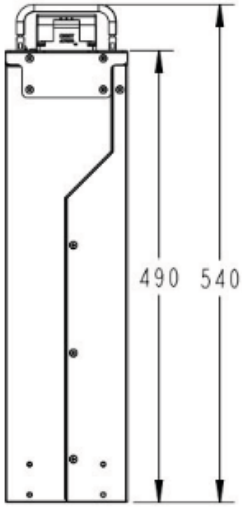
| NUMBER OF CYCLES ACCORDING TO THE AVERAGE DISCHARGE % OF USE | |
|---|---|
| 30% discharge | 8200 < cycles |
| 80% discharge | 6000 < cycles |
| 100% discharge | 3500 < cycles |

| MECHANICAL SPECIFICATIONS | |
|---|---|
| Dimensions | 529.5 X 482.6 X 133 mm \| 21 X 19 X 5.3 po |
| Group / format | 3U |
| Weight | 45.8kg \| 101 lbs |
| Terminal Type | M10 |
| Tightening torque on terminals | 8~10nm / 6-8 ft/lb |
| Ingress protection rating | IP20 (Against solid objects larger than 12 mm)<br>IP43 (With modular RJ45 plugs*) |

| CERTIFICATIONS & DESIGN | |
|---|---|
| Design | 16S1P |
| Certifications | Module : Full ETL UL1973 3rd Edition, UL9540A.<br>Full Battery Bank Certified UL9540 |
| Shipping classification | UN 3480 \| CLASS 9 |
| Cell type | SquareCell - LiFePO4 |


Volthium
51.2-100-R
133


529.5
441
482.6


490
540