

51V to 12V High Power DC to DC Buck Converter

Power Conversion Series



CAT # 52-158-51-12-2500



Buck Converter Details
2,500W Power Output
Water & Vibration Resistant
Voltage Output: 13.8V

KEY BENEFITS

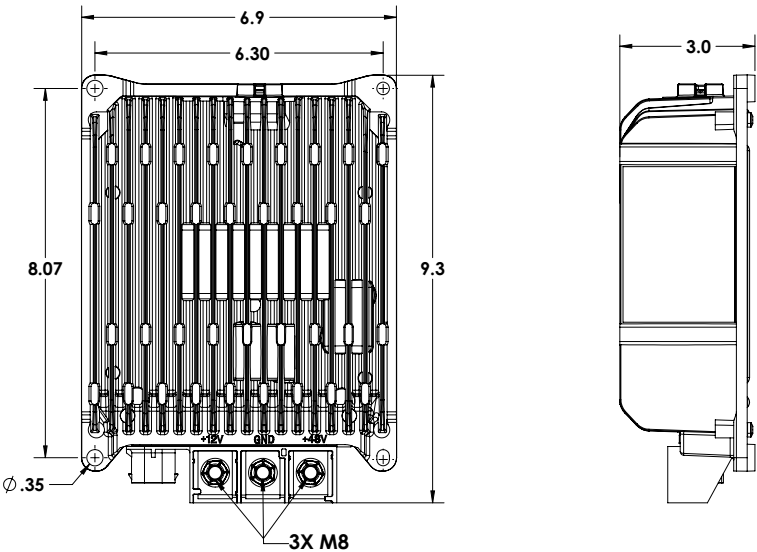
- + **High Power:** Efficiently converts voltage for house power applications
- + **Under Voltage Shut Off:** Eliminates the chance of overdischarge of the lithium battery
- + **Short Circuit Protection:** Autoresets with pulse current

Advanced Power Conversion

The DC-DC Buck Converter is engineered with advanced high-frequency power conversion technology to transfer power from the 51V house battery to 12V chassis loads. Our DC to DC converter provides a high efficiency stabilized output for various appliances.

DIMENSIONS

Size (L x W x H)	9.3" x 6.9" x 3.0"	236.2mm x 175.3mm x 76.2mm
Weight	6.5lbs	2.9kg



SPECIFICATIONS

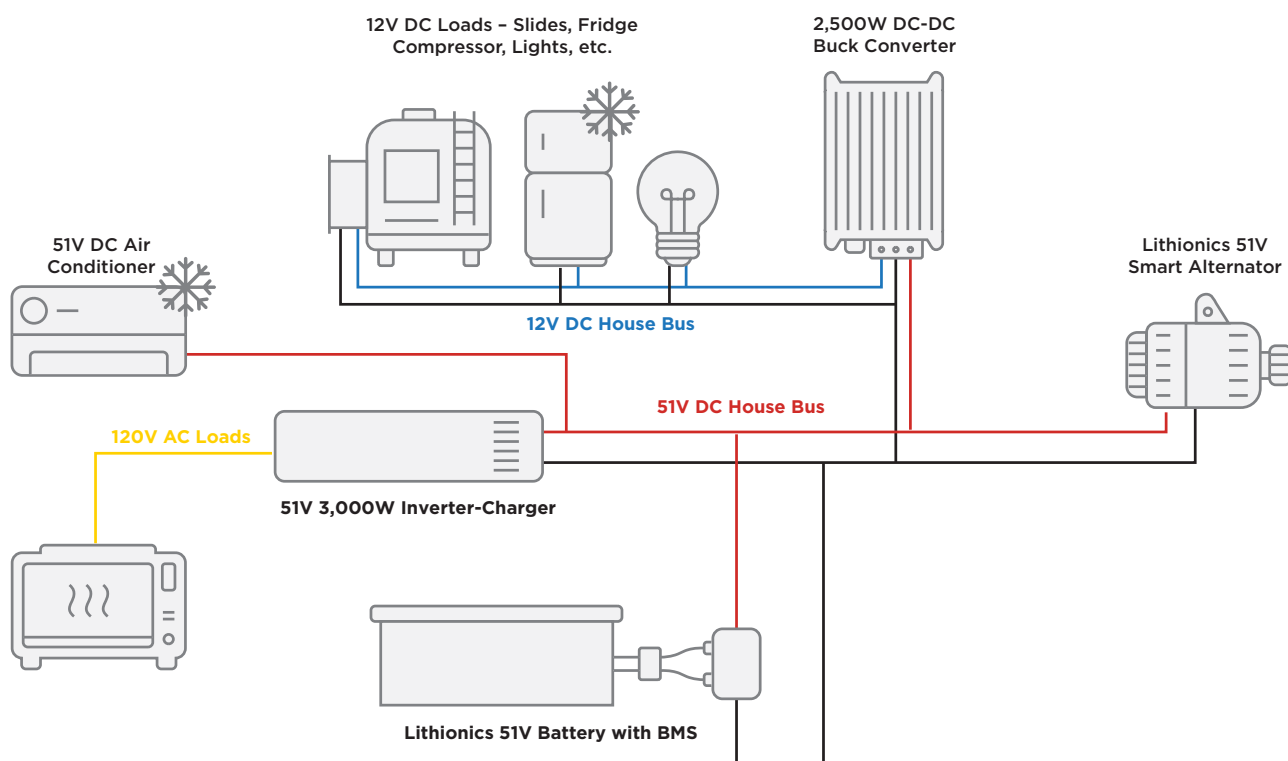
ELECTRICAL

Input Voltage	40.0V to 59.0V
Output Voltage	13.8V \pm 0.2V
Max Output Current	178A
Efficiency	>90% @5% load, >95% @100% load
Idle Power	2W
I/O Signal Connector	Reserved for future development, not currently used

MECHANICAL

Operating Temperature	-40°C to 120°C
Ingress Protection	IP67
Terminal Torque	11 \pm 1ft-lb (15 \pm 1.5Nm)

SYSTEM DIAGRAM



Powering Innovation.

Discover the right lithium replacement system for you. Reach out to Lithionics' expert support team to find your perfect power solution.