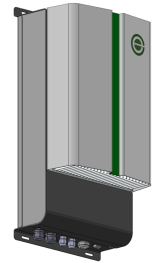


Efficient by design™

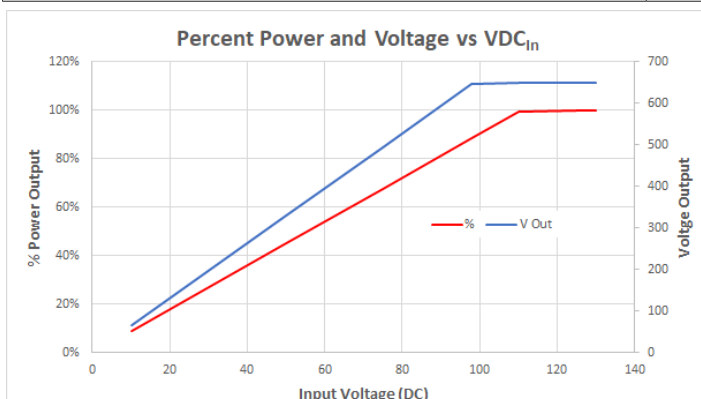
Our unique, isolated DC-DC converter topology improves value propositions for renewable and alternative energy solutions in three ways:

- 1. ultra-high efficiency** enables passive cooling (versus liquid or forced air), simplifying the system design, increasing reliability and lowering cost,
- 2. boost ratios greater than 10X** eliminate multiple conversion stages, reducing form factors, cost and complexity, and
- 3. the conversion efficiency increases with lower input voltage**, where conventional converters fail to operate, improving the ROI and extending useful life of the generator or energy storage.



10kW with standalone enclosure

Design Features	Units	10 kW	30 kW
Operating voltage range	VDC	10-130	
Low voltage before power de-rating	VDC	110	110
Input current limit	Amps	95	285
Voltage at 50% power	VDC	55	55
Conversion efficiency average	%	>95	
Max boost ratio		1 : 6.6	
Output voltage range	VDC	66-650	
Output current before power de-rating	Amps	31	93
Audible noise	dBA	Silent	
Bi-directional		Yes	
Communications		CAN	
Enclosure		As required	
Cooling		Passive	



Combined Energies holds U.S. Patent Nos. 9,413,271, 9,906,039, 10,404,071, 62/879,745 for our DC-DC converter design. Contact us to learn how our technology can maximize your application as a stand-alone solution for high voltage DC power output or integrated with an inverter for AC power.