

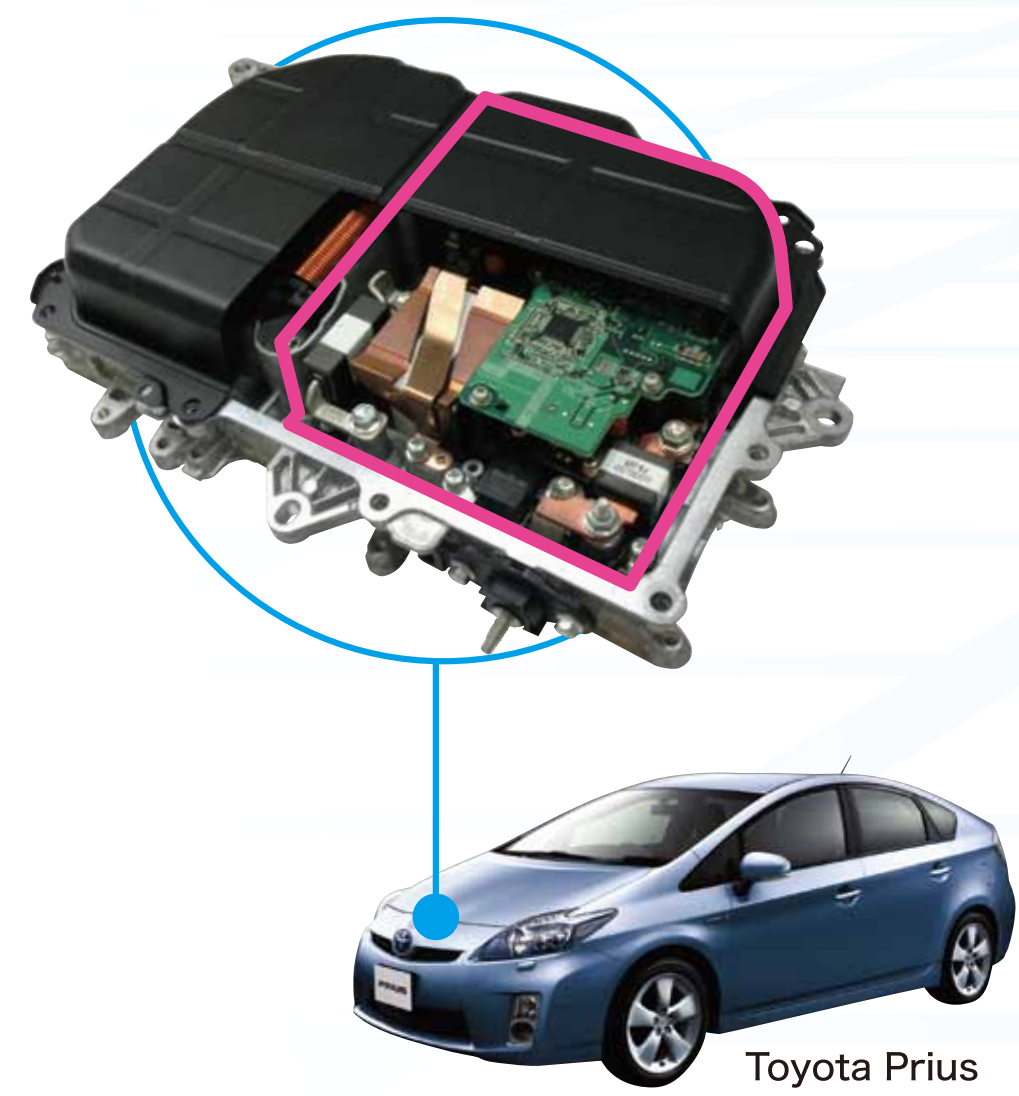
# DC-DC Converter

The DC-DC converter lowers the high voltage of the battery used in hybrid vehicles to supply power to on-board equipment such as lights and windshield wipers, as well as to charge the auxiliary battery. We also offer a line of power supplies for electric power steering.

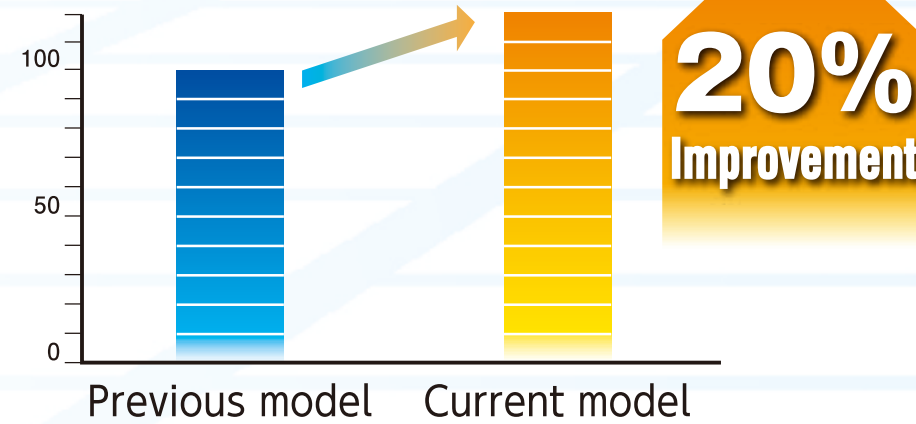
An idling-stop system automatically shuts down the vehicle's engine when the vehicle comes to a stop during traffic congestion or at a stoplight, thereby reducing fuel consumption. Because they improve fuel efficiency and reduce CO<sub>2</sub> emissions, idling-stop systems are expected to be widely adopted in the future.

## DC-DC Converter for the Toyota Prius

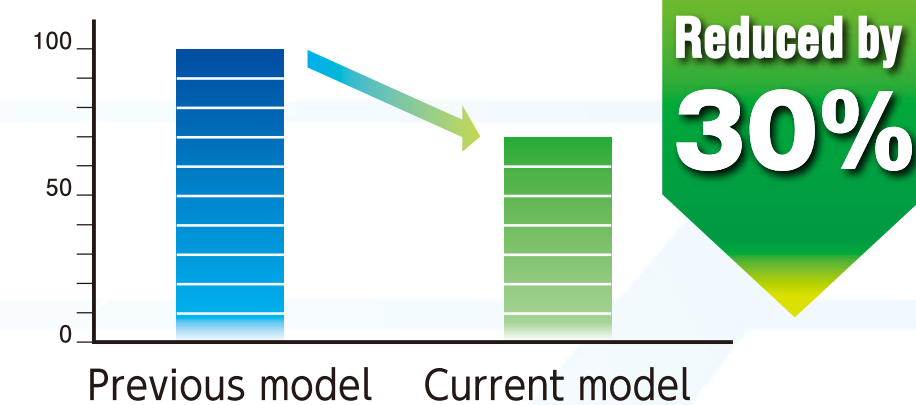
The use of a newly developed circuit for reduced size has resulted in a 20% output improvement and a 30% size reduction compared to the previous model. The new DC-DC converter is also installed in the LEXUS CT 200h.



### Output power



### Size

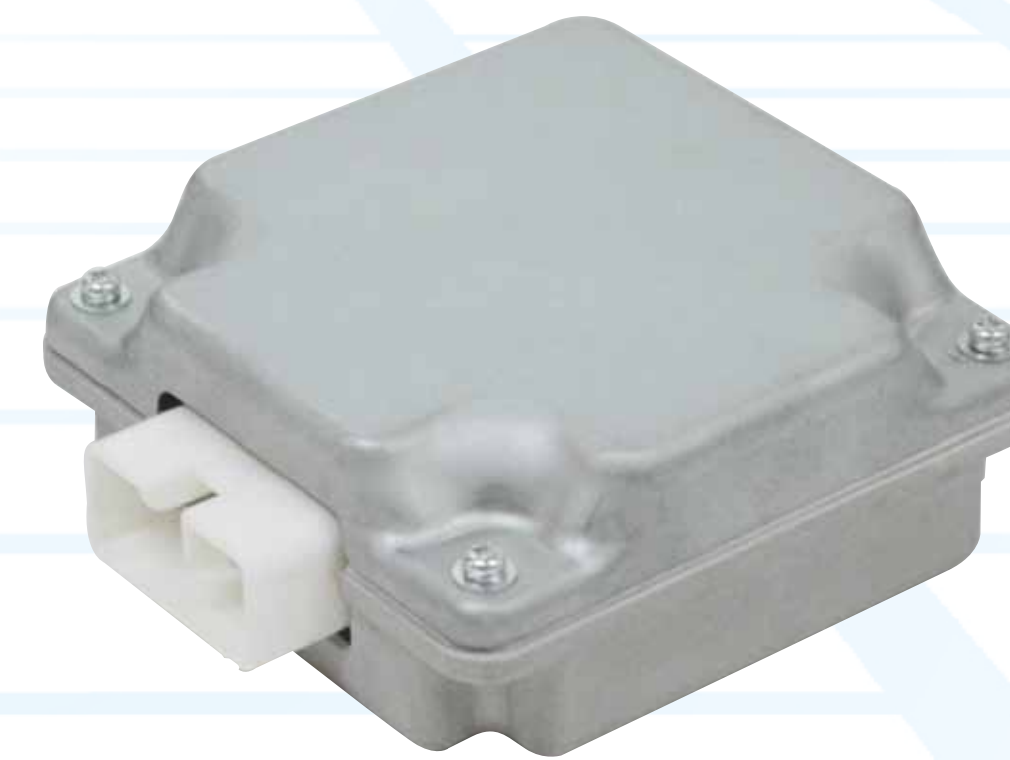


### Specifications

Input voltage range	: 90V-300V
Output voltage	: 14V
Output power	: 1,680W
Size	: 140×130×50mm
Weight	: 1,000g
Cooling method	: Water cooling
Location	: Inside the engine compartment

## Voltage Stabilizer

When the engine restarts, the voltage supplied from the auxiliary battery momentarily drops. The Voltage Stabilizer supplies stable voltage in order to protect on-board equipments such as the audio system, navigation system, and meters against this voltage drop.



### Product features

Compact size achieved using a dedicated IC

### Specifications

Input voltage range	: 6-12V	Size	: 97×97×32mm
Output voltage	: 12V	Weight	: 300g
Output power	: 400W	Cooling method	: Naturally cooling

## DC-DC Converter for the Toyota Yaris Hybrid

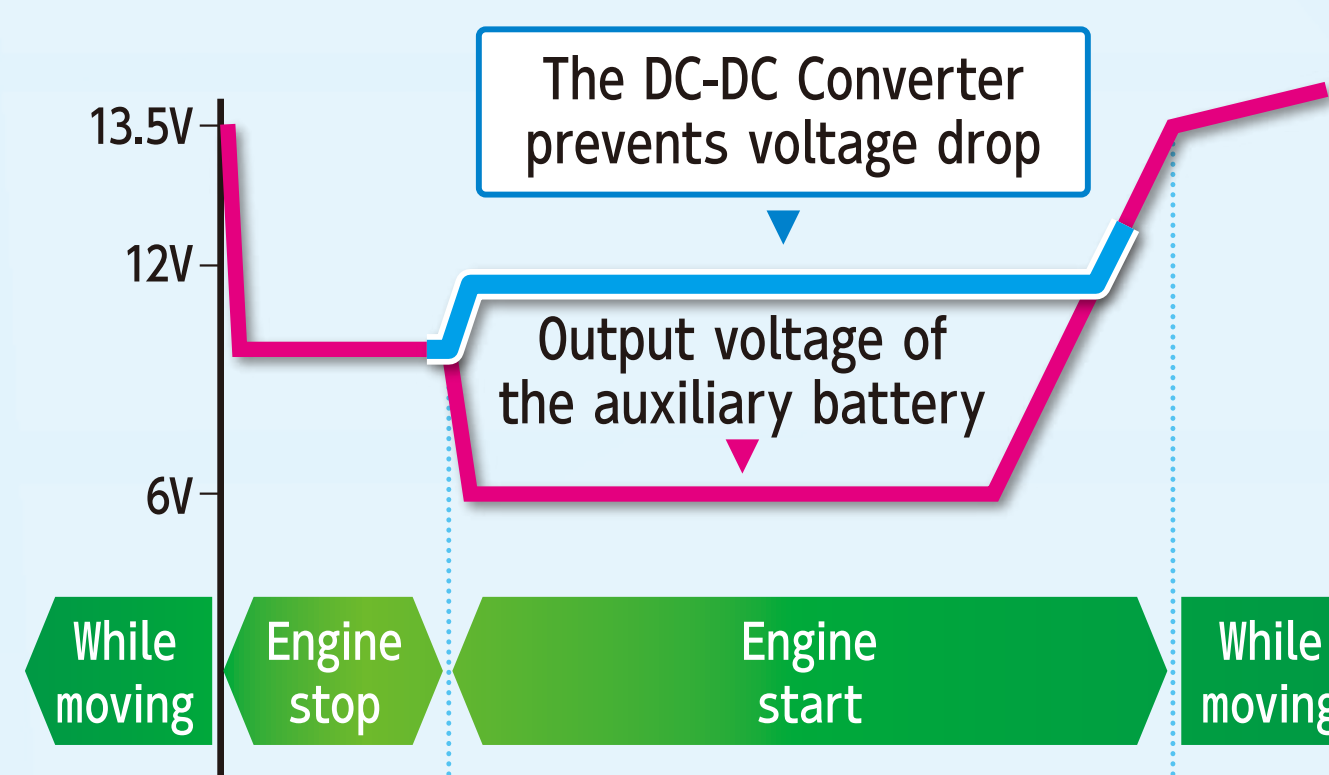
DC-DC converter for compact car.



### Specifications

Input voltage range	: 120V~200V	Size	: 140×130×45mm
Output voltage	: 14V	Weight	: 700g
Output power	: 1,120W	Cooling method	: Water cooling
Location	: Inside the engine compartment		

### Voltage fluctuation during engine restart



### Future development efforts

#### Energy Regeneration System

