

# Bi-directional DC/AC Converter with SiC-MOSFET



Compact Power Converter Module for embedded system.  
Designed for V2H, energy storage system and other power electronics solutions.

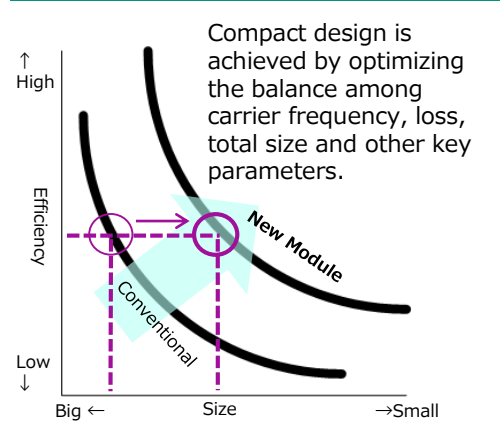
## Features

- Equipped with SiC-MOSFET by Rohm. Co
- Achieved high-power (4.5kW) and compact (3.4L, 30% compared to conventional module)
- More space for batteries and other components for embedded system
- Power Conversion Efficiency: 96%

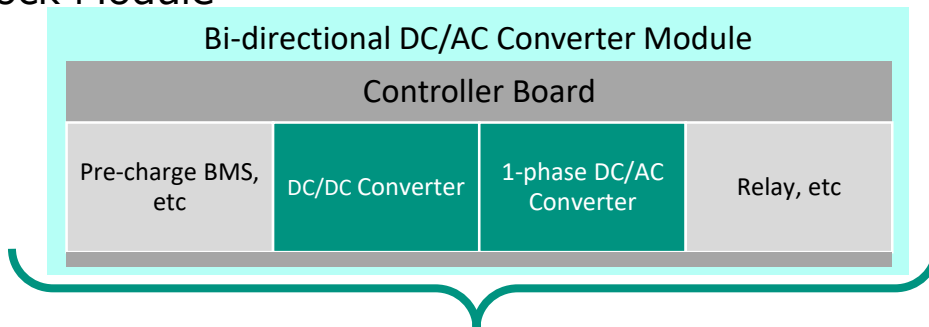
## Specification

Input	DC150~450V / 30A / 4.5kW
Middle	DC350~450V
Output	1φ2W / AC200V / 22.5Arms / 4.5kW
Size	W270×D120×H105mm
Switching Device	SiC-MOSFET
Switching Frequency	100kHz

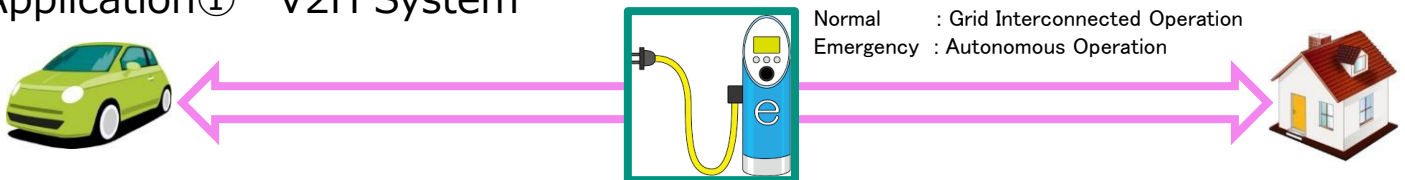
## Efficiency vs Size



## Functional Block Module

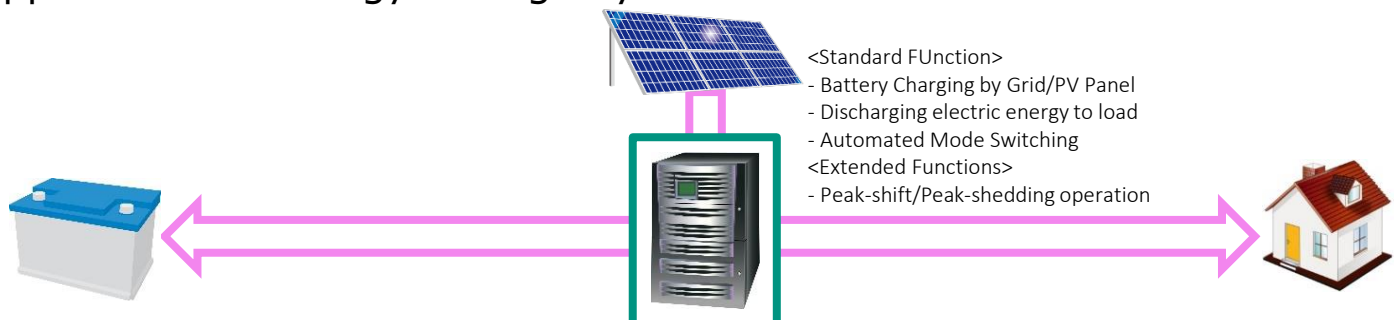


### Application① V2H System



Normal : Grid Interconnected Operation  
Emergency : Autonomous Operation

### Application② Energy Storage System



<Standard Function>  
- Battery Charging by Grid/PV Panel  
- Discharging electric energy to load  
- Automated Mode Switching  
<Extended Functions>  
- Peak-shift/Peak-shedding operation