

Shanghai OE Industrial Co.,Ltd.



OBC Catalog

Charging Technology
Creates Low-Carbon
Travel



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Why choose BROGEN

Strong R&D



Thermal Design Lab

It has comprehensive simulation and thermal design experimental capabilities to ensure product reliability and service life.



Performance Lab

It has a powerful high-power dynamometer system to meet experimental needs such as performance testing and road condition simulation.



Device Lab

Complete dissection and analysis equipment, comprehensively check the quality of components, and accurately analyze failed components.



EMC Lab

Passed the German TUV witness certification, the measurable items cover IEC/EN61800-3:2004



Safety Lab

Passed CNAS certification, covering IEC61800-5-1, GB12668.5-1 and other standards.



Environmental Lab

Through CNAS certification, it can carry out various environmental tests such as temperature, humidity, air pressure, salt spray, and vibration.



- China National Accreditation Service for Conformity Assessment CNAS National Laboratory
- The only manufacturer with TUV-MARK logo in the domestic industrial control industry
- The only manufacturer in the domestic industrial control industry that has been awarded the ACT qualification by TUV SUD and has passed the IATF16949:2016 quality system certification
- Passed the third-party test of the Southern Electronic Product Test of CCIC Passed the third-party test of the National Motor Vehicle Quality Supervision and Inspection Center Passed the third-party test of the State Grid Electric Power Research Institute
- Passed the third-party testing of the State Grid Corporation's automation equipment electromagnetic compatibility laboratory



/ OBC(DC/DC+PDU)MODULE

Product introduction:

The DC/DC converter is used for voltage conversion, replacing the traditional alternator, converting the energy of the high-voltage power battery into a 12V low-voltage, and providing the power demand of the low-voltage power system of the vehicle. When the power of the 12V low-voltage battery is insufficient, charge the 12V low-voltage battery to ensure that the power of the battery is sufficient to meet the needs of vehicle electrical appliances. The electrical system interface of the DC/DC part includes high voltage input, low voltage output and control communication signals.



Product Features:

- Water cooling, small size, light weight
- Satisfy the safety requirements of passenger cars, car-grade devices
- Sleep current is less than 100UA, supports CAN wake-up, hard-wire wake-up
- Input anti-reverse protection, output anti-reverse protection, input and output overcurrent protection, short circuit protection
- Conducted disturbance characteristics should meet the requirements of GB/T 18655-2010, the third level of conduction disturbance limits for parts and components

/ Application



logistics vehicle



bus



Sanitation truck



commercial vehicle



passenger car



Minibus



Pick up



High protection level of the whole machine and wide working temperature range



Mainly adopt automotive grade components to improve product reliability



Optimal Algorithm, Higher Efficiency



High product efficiency, small size, flexible application



Rich protection functions: built-in pre-charging circuit to prevent circulation, intelligent fan control, improved service life and fault detection, etc.



DC-DC has a unique instantaneous 120~150% overload output to ensure that it can carry capacitive load



Enhanced design for vibration resistance



Unit and integrated products are optional



Reasonable wiring, EMC full bandwidth



/ 3 in 1(OBC+DCDC+PDU)

GQ049

Product introduction:

This product integrates OBC, DC-DC module and PDU unit, OBC output 6.6KW, DC-DC output 2KW(peak value 2.4KW), adopts water cooling to dissipate heat, meets IP67 level, product is small in size, high in efficiency, stable in operation, CAN bus Communication, voltage and current can be set in real time, with input over-voltage protection, output over-current protection, output over-voltage protection, output short-circuit protection, over-temperature protection and other functions.

Features:

Dimensions: 346mm×342mm×168mm Machine weight: 20KG
OBC module efficiency: 95% DC-DC module efficiency: 94%



Passenger car three in one(OBC+DCDC+PDU)

Item		Technical indicators	
Product Model Specifications		6.6kW OBC	2.0kW DCDC
Input	Input voltage	85-264Vac	200VDC - 450VDC
	Maximum input current	32A	11A
Output	maximum output power	6.6kW	Peak 1.5KW
	Output voltage range	200-420Vdc	13.8±0.3V
	Maximum output current	20A	145A
other	Use ambient temperature	-40°C ~ +85°C	
	Cooling method	Water cooling	
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection	
	Protection class	IP67	
	Weight	20KG	
	Dimensions	346mm×342mm×168mm	



/ 2 in 1(OBC+DCDC)

GVD570-P3R3L1R5LLL

Product introduction:

This product is a comprehensive product, including on-board charger and DC converter. It is small in size, light in weight and compact in design. It is a product designed and developed for passenger cars.

Features:

Die-cast box, water cooling and heat dissipation Meet anti-vibration requirements Easy installation and wiring Small size, high power density
OBC passed QC/T895-2011 certification DCDC passed GB/T24347-2009 certification
For passenger car development, all core components have passed AECQ certification



Passenger car two in one(OBC+DCDC)

Item		Technical indicators	
Product Model Specifications		3.3kW OBC	1.5kW DCDC
Input	Input voltage	220V AC±15%	220VDC - 450VDC
	Maximum input current	16A	9A
Output	maximum output power	3.3kW	Peak 1.8KW(≥6MIN)
	Output voltage range	200 ~ 430VDC	9VDC ~ 16VDC
	Maximum output current	12A	128A
other	Use ambient temperature	-40°C ~ +85°C	
	Cooling method	Water cooling	
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection	
	Protection class	IP67	
	Weight	7.5KG	
	Dimensions	189W×281D×121H (mm)	

OBC

GAD662M700-2 M1



Product introduction:

This product is a 6.6KW on-board charger (OBC) with a single-phase 85-265Vac input voltage and a high-voltage output range of 400- 680Vdc. It supports constant current charging, constant voltage charging, and constant power charging modes. The internal uses highly integrated modularity Technology, compact structure, high efficiency, high reliability and strong earth quake resistance.

Features:

Dimensions: length 360mm×width 294mm×height 100mm machine weight: 9.5KG±0.5
 Overall efficiency: 95% Protection level: IP67 Water cooling
 CC wake up, recognition function



Passenger car OBC

Item		Technical indicators
Product Model Specifications		6.6kW OBC
Input	Input voltage	85-265Vac
	Maximum input current	32±3A
Output	maximum output power	6.6kW
	Output voltage range	400- 680Vdc
	Maximum output current	12A
other	Use ambient temperature	-40°C ~ +85°C
	Cooling method	Water cooling
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection
	Protection class	IP67
	Weight	9.5KG±0.5
	Dimensions	360mm×294mm×100mm

OBC

GAD203M570- 1M1



Product introduction:

This product is a 20KW three- phase four-wire car charger, input voltage is 323-437Vac,High voltage output range is 330-570Vdc,Support constant current charging, constant voltage charging, constant power charging mode, internal Adopt mature soft switch technology, compact structure, high efficiency, high reliability, strong earthquake resistance

Features:

Dimensions: length 466mm × width 325mm × height 155mm Machine weight: 25KG
Overall efficiency: $\geq 95\%$ Protection level: IP67 Water cooling Support plug-in wake up



Passenger car three in one(OBC+DCDC+PDU)

Item		Technical indicators
Product Model Specifications		20kW OBC
Input	Input voltage	3 phase 323—437 Single phase 176- 264
	Maximum input current	34A
Output	maximum output power	20kW
	Output voltage range	330-570Vdc
	Maximum output current	46.5A
other	Use ambient temperature	-40°C ~ +85°C
	Cooling method	Water cooling
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection
	Protection class	IP67
	Weight	25KG
	Dimensions	466mm × 325mm × 155mm



/ 3 in 1(OBC+DCDC+PDU)

GQ022

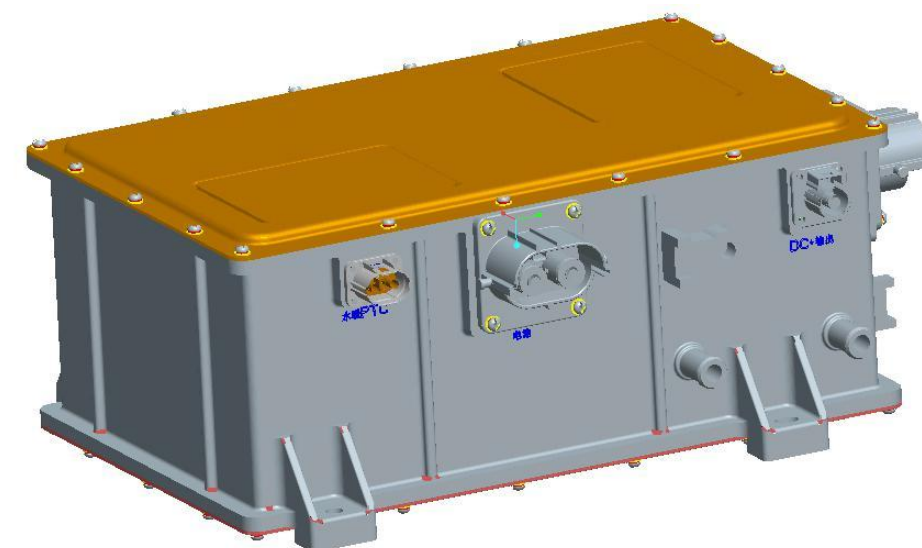
Product introduction:

This product integrates OBC, DC-DC module and PDU unit, with OBC output of 11KW and DC-DC output of 2KW(peak value of 2.5KW). It adopts water cooling and heat dissipation, and meets THE requirements of IP67 grade. The product has small volume, high efficiency, stable operation, CAN bus communication, and real-time voltage and current setting. With input overvoltage and undervoltage protection, output overcurrent protection, output overvoltage protection, output short circuit protection, over temperature protection and other functions.

Features:

Dimensions: 400mm×255mm×168mm(excluding connector) Machine weight: 25KG

OBC module efficiency: 94% DC-DC module efficiency: 93%



Passenger car three in one(OBC+DCDC+PDU)

Item		Technical indicators	
Product Model Specifications		11kW OBC	2.5kW DCDC
Input	Input voltage	Three phase 360-440 vac Single phase 200-260 vac	240-450VDC
	Maximum input current	32/16A	8.1A
Output	maximum output power	6.6kW	Peak 1.5KW
	Output voltage range	310-400VDC	13.8±0.3V
	Maximum output current	30A	145A
other	Use ambient temperature	40 - +70°C	
	Cooling method	Water cooling	
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection	
	Protection class	IP67	
	Weight	25KG	
Dimensions		400mm×255mm×168mm(excluding connector)	



/2 in 1(OBC+DCDC)

Q592A

Product introduction:

This product is an OBC/DCDC integrated machine. OBC rated output 240-415Vdc/6.6KW; DCDC rated output 13.8V/1.5KW (peak 1.8KW). The internal parameters of the machine can be set by the upper-level monitoring unit or adjusted by the upper-level monitoring unit through the CAN interface. With input over-voltage protection, output over-current protection, output over-voltage protection, output short-circuit protection, over-temperature protection and other functions

Features:

Dimensions: 313.5mm×266mm×134mm Whole machine weight: ≤9.5KG Overall efficiency: 94% Output ripple and noise: ≤2%Vo



Passenger car two in one(OBC+DCDC)

Item		Technical indicators	
Product Model Specifications		6.6kW OBC	1.8KW/6 minutes
Input	Input voltage	176-265Vac	240-430Vd c
	Maximum input current	32±3A	8A
Output	maximum output power	6.6kW	Peak 1.5KW
	Output voltage range	310-400VDC	13.8±0.3V
	Maximum output current	18A	108A
other	Use ambient temperature	40 - +70°C	
	Cooling method	Water cooling	
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection	
	Protection class	IP67	
	Weight	≤9.5KG	
	Dimensions	313.5mm×266mm×134mm	

OBC

GAD662M350-2M1R



Product introduction:

This product is a 6.6KW on-board charger (OBC), the input voltage is single-phase 85-265Vac, and the high-voltage output range is 200-415Vdc. It supports constant current charging, constant voltage charging, and constant power charging modes. It adopts highly integrated modularity inside. Technology, compact structure, high efficiency, high reliability and strong earthquake resistance.

Features:

Dimensions: length 466mm × width 246.5mm × height 126.5mm Whole machine weight: 12.3KG±0.5 Overall efficiency: 95% Protection level: IP65 Air cooling



Passenger car OBC

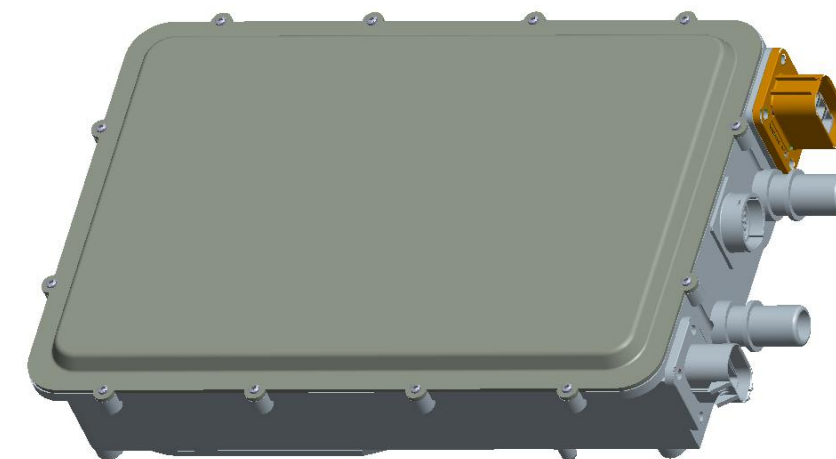
Item		Technical indicators
Product Model Specifications		6.6kW OBC
Input	Input voltage	85-265Vac
	Maximum input current	32±3A
Output	maximum output power	6.6kW
	Output voltage range	200-415Vdc
	Maximum output current	18A
other	Use ambient temperature	-40 — +85°C
	Cooling method	Water cooling
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection
	Protection class	IP65
	Weight	12.3KG±0.5
	Dimensions	466mm × 246.5mm × 126.5mm

Product introduction:

PV1776 product is a 6.6KW charger Single-product, in the actual application of external interface only AC input terminals, high-voltage DC output terminals, low-voltage signal terminals. 6.6KW Car On-board Charger is mainly used in new energy electric vehicle high-voltage power battery charging management, power module with output constant current, constant pressure and constant power function, with over-temperature automatic drop, overcurrent, short circuit and other multiple protection. The Power module running status information can be reported in real time via Can Bus.

Features:

machine overall size : 373*224*76.5mm ≤3kg



Passenger car OBC

Item		Technical indicators
Product Model Specifications		6.6kW OBC
Input	Input voltage	176-264Vac
	Maximum input current	32A
Output	maximum output power	6.6kW
	Output voltage range	200-430Vdc
	Maximum output current	22A
other	Use ambient temperature	-40 — +85°C
	Cooling method	Water cooling
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection
	Protection class	IP67
	Weight	≤3kg
	Dimensions	373*224*76.5mm



Product introduction:

The TR3610 series OBC has been designed for larger power charger application, single phase AC input, 400VDC-700VDC output. It can use in bus, commercial truck, and can withstand harsh environments(vibration, thermal shock and extreme temperature ranges). With the multi grid adaptability and the independent control unit , it is in full compliance with international standards such as SAE J1772 and EN61851

Features:

machine overall size : 550*396.5*100mm 25Kg±0.5Kg



Passenger car OBC

Item		Technical indicators
Product Model Specifications		20kW OBC
Input	Input voltage	90-265Vac
	Maximum input current	80A
Output	maximum output power	20kW
	Output voltage range	400-700Vdc
	Rated output voltage	540V
other	Use ambient temperature	-40 — +85°C
	Cooling method	Water cooling
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection
	Protection class	IP67
	Weight	25Kg±0.5Kg
	Dimensions	373*224*76.5mm



Product introduction:

The TR3610 series OBC has been designed for larger power charger application, single phase AC input, 400VDC-700VDC output. It can use in bus, commercial truck, and can withstand harsh environments(vibration, thermal shock and extreme temperature ranges). With the multi grid adaptability and the independent control unit , it is in full compliance with international standards such as SAE J1772 and EN61851

Features:

machine overall size : 550*396.5*100mm 25Kg±0.5Kg



Passenger car OBC

Item		Technical indicators
Product Model Specifications		20kW OBC
Input	Input voltage	90-265Vac
	Maximum input current	80A
Output	maximum output power	20kW
	Output voltage range	400-700Vdc
	Rated output voltage	540V
other	Use ambient temperature	-40 — +85°C
	Cooling method	Water cooling
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection
	Protection class	IP67
	Weight	25Kg±0.5Kg
	Dimensions	373*224*76.5mm



/ 2 in 1 (OBC+DCDC)

VAILD62388

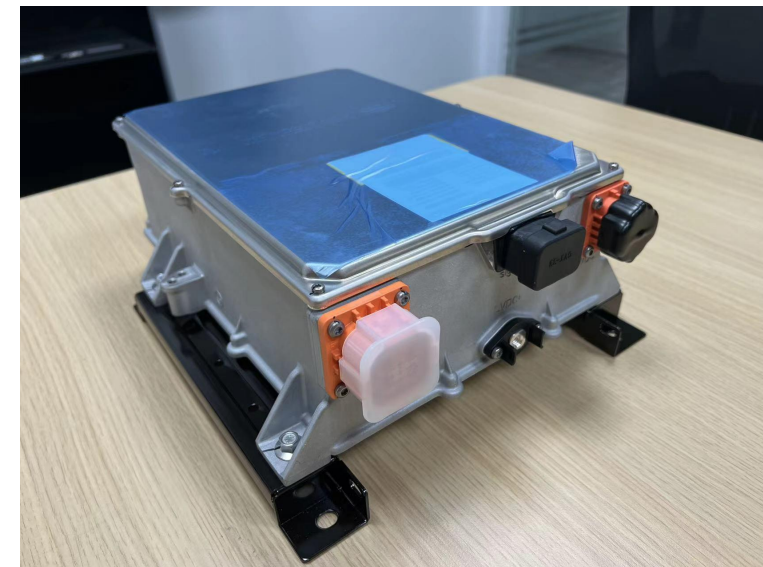
Product introduction:

The two-in-one product assembly consists of OBC and DCDC.

The OBC obtains energy from the AC grid and converts it into high-voltage direct current to charge the vehicle's power battery. The vehicle can monitor the entire charging process; the DCDC converter converts the high-voltage direct current into the required low-voltage direct current to provide 12V low-voltage power supply for the vehicle and the battery Charge.

OBC and DCDC report information such as voltage and current through CAN bus, and realize information exchange and working status feedback with BMS and VCU through CAN communication.

Features:
machine overall size : 279x202x68mm (without water nozzles, connectors and mounting feet) 5.5kg



Passenger car OBC+DCDC

Item		Technical indicators	
Product Model Specifications		6.6kW OBC	2.5KW DCDC
Input	Input voltage	176-264Vac	270 ~ 465Vdc (Rated Input voltage 400Vdc)
	Maximum input current	32A	12 A
Output	maximum output power	6.6kW	2.5KW
	Output voltage range	240V ~ 450 Vdc	9 ~ 16 Vdc
	Maximum output current	22A	180 A continuous
other	Use ambient temperature	-40 — +85°C	
	Cooling method	Water cooling	
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection	
	Protection class	IP67	
	Weight	5.5kg	
	Dimensions	279x202x68mm	



/ 3 in 1(OBC+DCDC+PDU)

VAILD60592

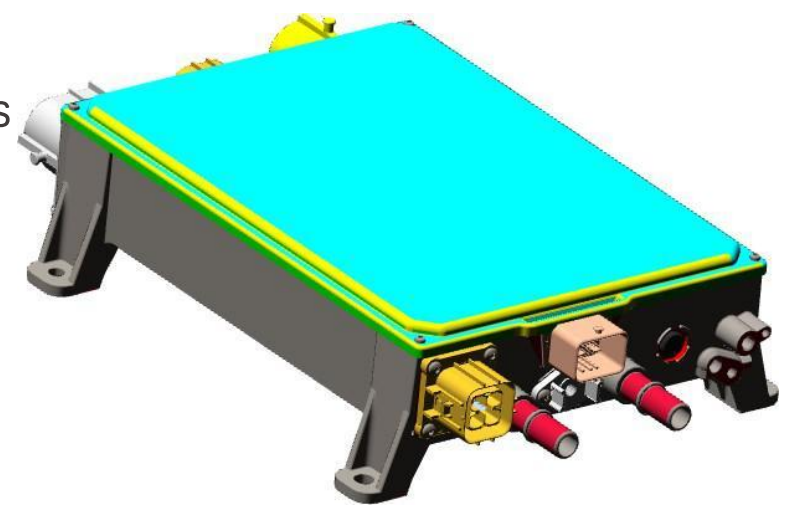
Product introduction:

The three-in-one product assembly consists of OBC, DCDC, and PDU.

The OBC obtains energy from the AC grid and converts it into high-voltage direct current to charge the vehicle's power battery. The vehicle can monitor the entire charging process; at the same time, **the OBC has an inverter function** to transfer energy from the power battery to the AC side. The on-board DCDC converter converts high-voltage direct current into required low-voltage direct current, provides 12V low-voltage power supply for the vehicle and charges the battery.

OBC and DCDC report output voltage and output current through CAN bus, and realize information exchange and working status feedback with BMS and VCU through CAN communication.

PDU consists of PTC, compressor, battery, MCU interface and corresponding insurance.



Features:

machine overall size : 321*227*79mm (without water nozzle, connectors and mounting feet)7.3KG

Passenger car two in one(OBC+DCDC+PDU)

Item		Technical indicators		
Product Model Specifications		6.6kW OBC	Inverter	2.5 KW DCDC
Input	Input voltage	85 ~ 265 Vac	300V ~ 460 Vdc	250V ~ 460Vdc
	Maximum input current	32 A max	24 A max	12 A
Output	maximum output power	6.6kW	6.6kVA	2.5 KW
	Output voltage range	250V ~ 460Vdc	220 AC (±5%) (output voltage)	14 Vdc
	Maximum output current	22 A		180 A
other	Use ambient temperature	-40 ~ +85°C		
	Cooling method	Water cooling		
	Protective function	Communication fault protection, input overvoltage protection, input undervoltage protection, output overvoltage protection, output undervoltage protection, overtemperature protection, demand voltage parameter configuration error protection, demand current parameter configuration error protection		
	Protection class	IP67		
	Weight	7.3KG		
	Dimensions	321*227*79mm (without water nozzle, connectors and mounting feet)		