

# Isolated DC-DC Converter



## Description

ipDCIS series isolated DC/DC converter applies advanced technology and is configured specifically for electric vehicles. It is very suitable to supply power to the lamp and audio system as it is very stable and clean. The advantages of high efficiency, stability and compact size, are achieved by adopting the advanced high frequency technology. It is sealed by silica glue to get water and vibration proof, which ensures the stability of the vehicle in atrocious condition.

It also can be used as a charger to charge the 12V battery in the electric automobile according to the customer's requirement.

Current equalizer is built in, which makes converters work in parallel possible in order to enlarge the capability.

## Specifications

Input Voltage:	36V 48V 60V 72V 96V 144V 220V
Output Voltage:	13.8V @0A (Can be used to charge battery) 12.0V @50A (typical)
Max Output Current:	32A @11V (typical)
Maximum Efficiency:	≥90%
Environmental Enclosure:	IP68
Shock and Vibration:	SAEJ1378
Safety-North America:	UL2202/UL1564 2nd Edition
Emissions- North America:	FCC Part 15/ICES 003 Class A
Immunity-Europe:	EN61000-4-2/3/5/6/11
Operating Temperature:	-20℃-60℃(-22-122)

## Protections

Water and Vibration Proofed: All sealed by silica glue to get water and vibration proof, which is suitable for all kinds of condition.

Input reverse polarity protection: Shut down, auto-reset.

Water Proofed Fuse: Input or output fuse, simple wiring.

No Arc: Input with no arc, can be controlled by key switch directly, without contactor

Short Circuit: Shut down with little plus current, auto-reset, ensure the wire safety.

Superheating Cutback: Reduce output current if the temperature is over 65℃, ensure the continuous power for your car.

Input Reverse Polarity: Electronic protection, auto-reset.

Input Low Protection: Shut down, auto-reset, prevent the battery from over discharging

## Type Table

Type	Battery Voltage	Output Voltage	Output current	Input Volt Range
ipDCIS-3612	36V	12V	30A/50A	24V-48V
ipDCIS-4812	48V	12V	30A/50A	36V-75V
ipDCIS-6012	60V	12V	30A/50A	45V-90V
ipDCIS-7212	72V	12V	30A/50A	45V-90V
ipDCIS-9612	96V	12V	30A/50A	76V-120V
ipDCIS-14412	144V	12V	30A/50A	100V--180V
ipDCIS-22012	220V	12V	30aA50A	165V-286V

## Type Description

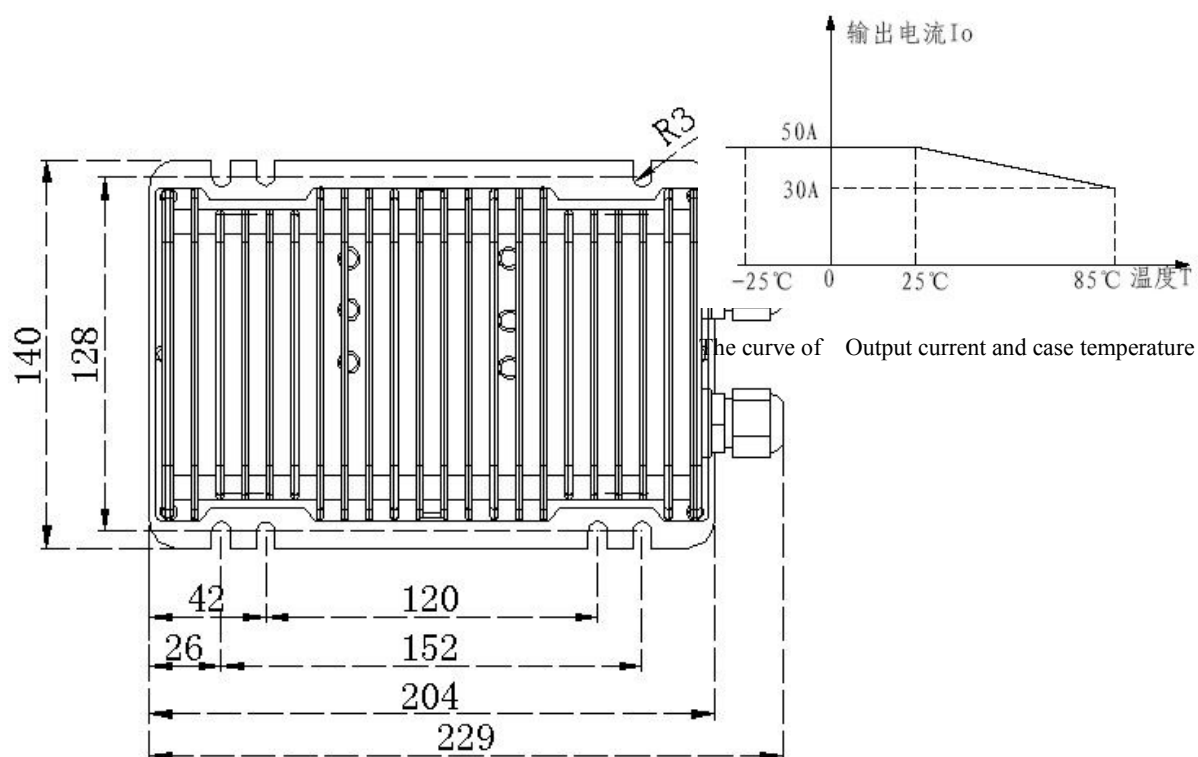
### ipDCIS - 7212 - 30

Output curret: 30 mean 30 Amp
Output Voltage: 12 mean 12V
Input Voltage: 72 mean 72VDC
Basic Type: IS mean Isolated

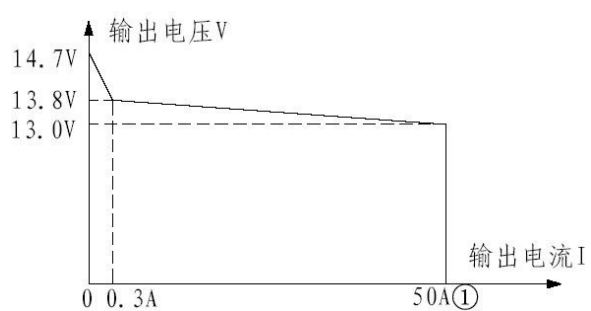
## Wire

Yellow: Input + (1.5mm <sup>2</sup> )	Red: Output + (4.0mm <sup>2</sup> )
Grey: Input- (1.5mm <sup>2</sup> )	Black: Output - (4.0mm <sup>2</sup> )
Green: The key switch controls (0.5 mm2)	

## Installation Size



## Output characteristic curve



Output characteristic curve

