



## DCIS-8412 Series Isolated DC-DC Converter



### Overview

The **DCIS-8412** series isolated DC-DC converter is designed to drop EV traction battery voltages to 12V to supply devices such as headlights and audio systems. It features a small form factor, high efficiency, stabilized output voltages, and extensive protection against faults.

DCIS series isolated DC-DC converters are electrically isolated from input to output for enhanced safety. The stabilized output voltage can charge 12V batteries. Multiple DC-DC converters can be used in parallel directly to increase output current.

### Specifications

<b>Input Voltage:</b>	84V
<b>Output Voltage:</b>	12V
<b>Max. Output Current:</b>	50A
<b>Maximum Efficiency:</b>	≥88%
<b>Intrusion Protection:</b>	IP65
<b>Operating Temperature:</b>	-20°C-+60°C

### Protections & Functions

<b>Water &amp; Vibration Resistance:</b>	Sealed with silicone to withstand moisture in harsh environments
<b>Key Switch Control:</b>	The device can be wired to a key switch or an input relay
<b>Overheat Protection:</b>	Automatic current reduction above 65°C without shutdown
<b>Short Circuit Protection:</b>	Shuts down and resets automatically
<b>Undervoltage Protection:</b>	Shuts down when battery voltage is too low to avoid over-discharge

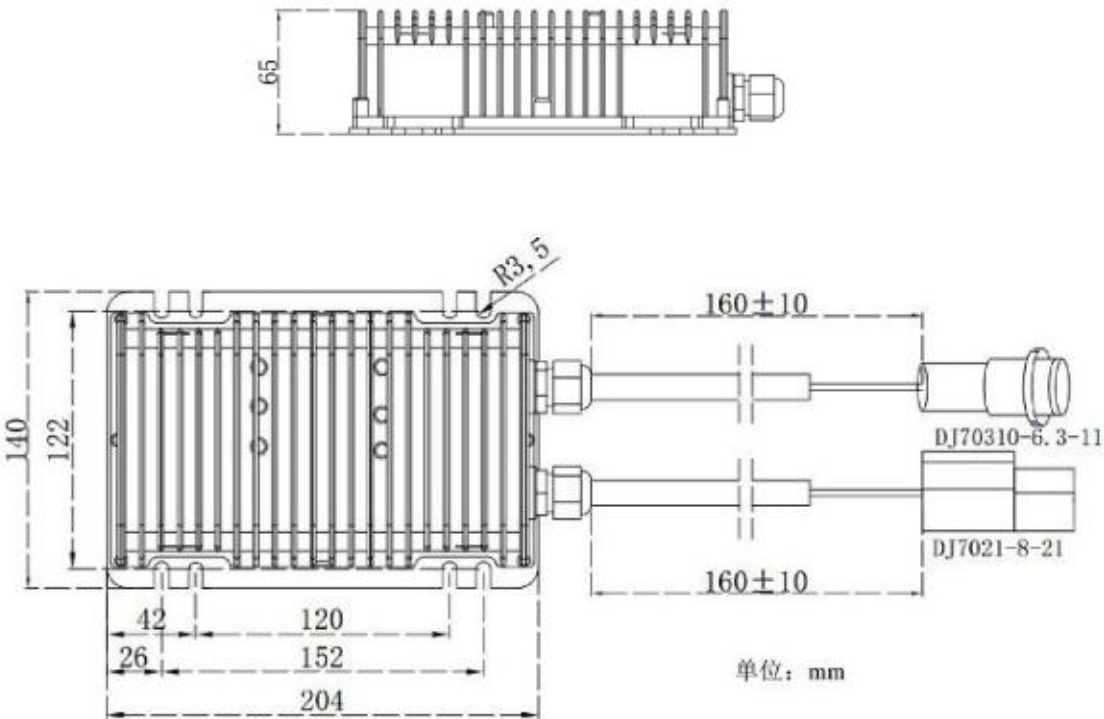
### Connections

- Yellow: Input + (1.5mm<sup>2</sup>)
- Red : Output + (6.0mm<sup>2</sup>)
- Grey: Input - (1.5mm<sup>2</sup>)
- Black: Output - (6.0mm<sup>2</sup>)
- Green: Key Switch Controls (Option) (0.5 mm<sup>2</sup>)

### Notes

1. Do not switch input and output wires. Incorrect connection will cause damage.
2. Do not open the enclosure of the device as there is risk of electric shock.

# Mechanical Dimensions - DCIS-8412 Series DC-DC Converter

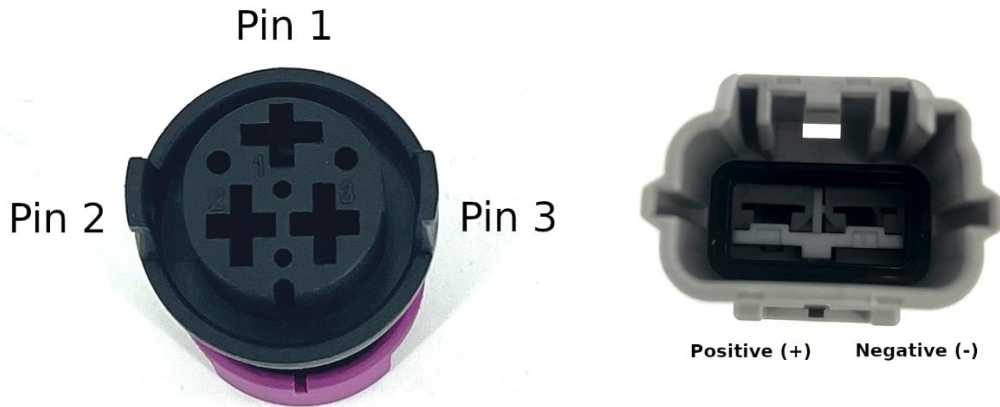


**\*Interface Description:**

1.Output+	Red	6.0mm <sup>2</sup> ;
2.Output-	Black	6.0mm <sup>2</sup> ;
3.Key Switch Control(Optional)	Green	0.5mm <sup>2</sup> ;
4.Input+	Yellow	1.5mm <sup>2</sup> ;
5.Input-	Grey	1.5mm <sup>2</sup> ;

Type 2 male/female connectors

## Pin Connectors - DCIS-8412 Series DC-DC Converter



- Pin 1 - Green
- Pin 2 - Grey
- Pin 3 - Yellow

## Wiring Diagram - DCIS-4812 Series DC-DC Converter

