

# ISOLATED GROUND STEP UP & DOWN DC-DC CONVERTER

SDC-8170, 8270

## Description

This series of Isolated Ground DC-DC converters provide clean and regulated DC power for voltage sensitive devices, eliminate voltage surge due to sudden withdrawal of high current load.

It regulates changing input dc voltage to a stable factory preset dc output voltage.

Typical applications: DC power conditioning for control and instrumentation, telecommunication and other voltage sensitive electronic equipments, electronic devices such as TFT screens, audio and video equipments.

Make up for the voltage drop in long wire running from battery, or due to sudden high current drain on the battery during engine cranking.

The high efficiency advanced switching mode circuit design makes convection cooling possible in a compact aluminum extruded casing.

The totally enclosed plastic end caps and sealed construction make this robust converter moisture, and dust proof. It can withstand the harsh and humid working environment.

The plastic clip-on mounting system makes the installation easy even in a hard to reach tight spot.

Isolated DC-DC converters can provide positive or negative voltages from a single device, and may be also be used with either a positive or a negative input voltage source, as long as the relative polarity of the input to the device is maintained.



## Features

- Isolated Ground.
- Step up and Step down voltage conversion.
- Regulated stable clean dc power output.
- Input and Output galvanic isolation.
- Slim, compact, light aluminum casing.
- Dust and moisture proof construction.
- High efficiency switching mode design.
- Excellent line and load regulation.
- Low Ripple and Noise.
- High RFI Stability.
- Input under & over voltage protection.
- Short circuit & over load protection by constant current.
- Over temperature protection.
- Reverse polarity protection.
- Loss of earth protection.
- LED indicators of operation and fault status.
- E-Mark Approval.

## Specifications

Models	SDC-8170	SDC-8270
Input Voltage Range	10-16VDC	20-32VDC
Output Voltage	13.5VDC**	27VDC**
**Other factory preset output voltage within the specified range of 12-13.5V for SDC-8170 and 24 to 27V for SDC-8270 is available.**		
Continuous Output Current	4.5A	3A
Maximum Output Current (30 minutes)	6A	4A
No Load Current	<120mA	
Ripple & Noise (peak-peak)	<50mV	
Ripple & Noise (r.m.s.)	<10mV	
Load & Line Regulation	10mV	
Efficiency	≥86%	
Protections	Reverse Polarity, Overload, Short Circuit, Input under and over voltage and Over Temperature	
Indicators	Green LED: Operate Red LED: Fault	
Input & Output Connection Type	Push in slip on connectors	
Cooling System	Natural Convection	
Maximum Operating Temperature	40°C	
Internal Input Fuse (Glass type)	10A	
Approvals	e-mark E8	
Dimensions (WxHxD)	77x75x32 mm 3x3x1.3 inch	
Weight	250 g 8.8 oz	
Accessory	Clip-on Mounting Bracket set and Screw, Slip-on Push in type Receptacles	

\* All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

\* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE