

DC - DC CONVERTER

SDC - 5330 / 5340 / 5360

Programmable DC-DC Converter with battery charger function

Manson®



Features

- Micro-Processor Control with switching mode power design
- 19 -36VDC Input with adjustable Output 12 to 15VDC in 0.2V step.
- 3 digit LCD display for Current, Voltage, Operation Mode and Protection Diagnosis .
- 2 Stage full powered charger mode with 14.3V bulk and 13.6V float charge.
- Remote Voltage Sensing for optimal powering of distant load or charging battery.
- Remote control terminal auto On/Off with ignition control and other external on/off switch.
- An independent always-on auxiliary output (0.5A, 13.8V) to power critical electronic device or the remote on off switch
- 8 fail- save protections of which 6 with diagnostic code at the LED display.
- Input under voltage warning has remote alarm connection.

Specifications

Models	SDC - 5330	SDC - 5340	SDC - 5360
Input Voltage Range	19 - 36VDC		
Output Voltage	13.8VDC		
Adjustable Output Voltage Range	12 - 15VDC (0.2V increments)		
Continuous Output Current	30A	40A	60A
No Load Current	<50mA	<50mA	<50mA
Efficiency	≥90%	≥90%	≥90%
Protections	OVP (Output Over Voltage Protection), Overload, Input Reverse Polarity, Over Temperature Protection, Output Short Circuit Protection		
Aux. Output (Always ON)	13.8VDC / 0.5A		
Two Stages Battery Charger	Bulk 14.3VDC, Float 13.6VDC		
Output Remote on/off Control	Yes		
Remote Sense	Yes		
External Alarm Output	13.5VDC / 0.25A		
Indicators	3 digits LED display for V, A & Fault Indication, Battery Charger Indicator		
Cooling System	Thermostatic Control Fan		
Operating Temperature	-10°C to +50°C		
Approvals	CE EN 55022		
Dimensions (WxHxD)	130x55x190 mm 5.2x2.2x7.5 inch	130x55x210 mm 5.2x2.2x8.3 inch	130x55x210 mm 5.2x2.2x8.3 inch
Weight	1kg 2.2lbs	1.2kg 2.64lbs	1.2kg 2.64lbs
Recommended Battery Capacity Range	100AH to 300AH	130AH to 400AH	200AH to 600AH

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

■ SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

Description

This new series of non-isolated digital DC-DC Step Down Converter with micro-processor control for fine adjustment of output voltage to optimally suit the loading condition.

The 3 digit LED display shows: output voltage, current, operation mode and fault status

It is further equipped with 4 special features:

1. A full powered 2 Stage Charger with 14.3V Bulk & 13.6V Float Charge.
2. A Remote Voltage Sensing at load point to ensure accurate output voltage for distant load/ battery to ensure optimal operation.
3. The Remote Control terminal that turns on the converter at the same time the Ignition Switch is tuned on. It can be used with other external on-off switch .
4. An independent, separate and always-on output (0.5A 13.8VDC) for essential devices such as security system that requires a permanent dc source.
It can also be used for the remote on off switch.

Extensive Protections

Multi-stage software based safety device with early warnings of impending shut down faults for low input voltages.

Most of the protections are self recoverable when conditions return to normal with 6 diagnostic code on the LED display.

Extensive Protections

- Input under voltage (self recoverable)
- Input over voltage (internal fuse)
- Output over voltage (self recoverable)
- Output short circuit (self recoverable)
- Output overload (self recoverable)
- Output (battery) reversed polarity (internal fuse)
- Over temperature (self recoverable)
- Fan failure (self recoverable)