

12V to 24V 10A 240W DC-DC CONVERTER, NON-ISOLATED

FEATURES

- ✓ Wide input voltage from 11V to 16V
- ✓ Stable output voltage is 24V
- ✓ 100% full rated power
- ✓ 100% full stable output Current
- ✓ High efficiency up to 95%
- ✓ Waterproof sealed
- ✓ Cooling by free air convection
- ✓ Surface mountable
- ✓ 1 year warranty
- ✓ Over current protection, Over voltage protection
- ✓ Over temperature, Output Short circuit protection
- ✓ According to: EN 61000-6-3:2007/A1:2011/AC:2012 EN 55014-1:2006/A2:2011 EN 60950-1:2006/AC:2011 IP68

model	input voltage range (Vdc)	output voltage (Vdc)	output current typ (A)	output power max (W)	ripple and noise typ (mVp-p)	efficiency typ (%)
H10-12-24	11-16	24	10	240	150	95

Notes: All specifications measured at 25°C, nominal input voltage, and full load unless otherwise noted.

INPUT

Parameter	Test conditions or description	Min	Typ	Max	Units
operating input voltage	12 V input	11	12	16	Vdc

OUTPUT

Parameter	Test conditions or description	Min	Typ	Max	Units
line regulation	measured from high line to low line			±0.2	%
load regulation	measured from full load to zero load			±0.2	%
voltage accuracy				±1.5	%
adjust range		23.9	24	24.1	V
temperature coefficient			±0.03		%/°C

PROTECTIONS

Parameter	Test conditions or description	Min	Typ	Max	Units
output over voltage protection	%Vo	115		140	%
Output short circuit protection	Continuous				
current limit	% nominal output current	105	110	125	%
thermal shutdown case temp.			85		°C
cooling	free air convection				
fuse	built in PCB		40		A

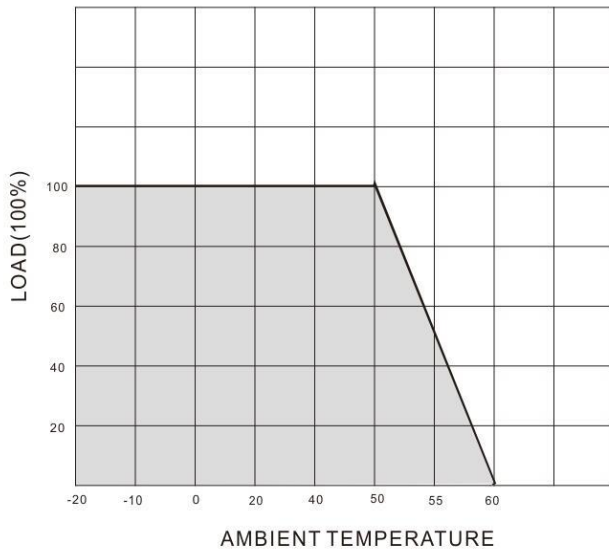
SAFETY AND COMPLIANCE

Parameter	Test conditions or description	Min	Typ	Max	Units
safety approvals	EN 61000-6-3:2007/A1:2011/AC:2012 EN 55014-1:2006/A2:2011 EN 60950-1:2006/AC:2011				
enclosures	IP68				

ENVIRONMENTAL

Parameter	Test conditions or description	Min	Typ	Max	Units
case operating temperature		-40	25	85	°C
Ambient temperature		-20		60	°C
storage temperature		-40		105	°C
humidity	non-condensing			95	%

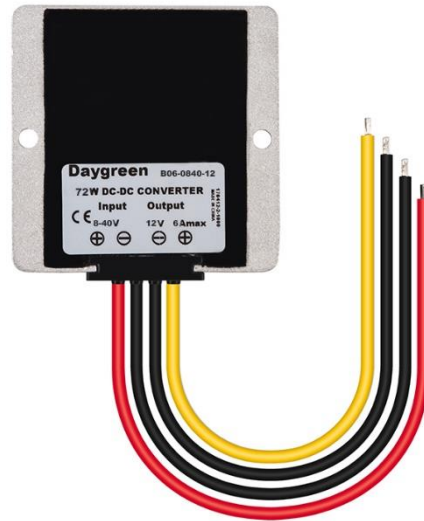
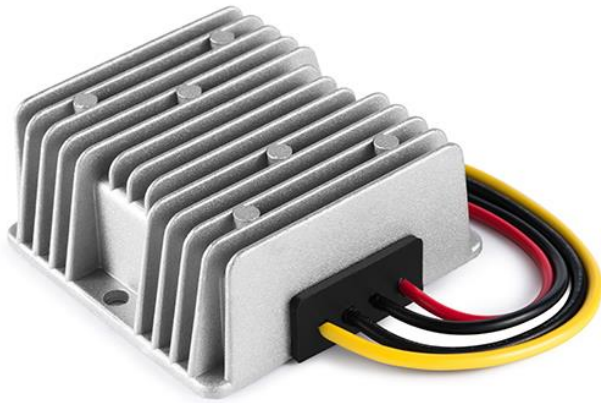
DERATING CURVE



MECHANICAL

Parameter	Test conditions or description	Min	Typ	Max	Units
dimensions (L x W x H)	2.91 x 2.91 x 1.22 (74 x 74 x 31 mm)				inch
Wire length	18				cm
case material	aluminum				
weight		260	280	300	grams
Package	1pcs/box, 50pcs/carton				
Carton measurement	51.5*34.5*10.5cm				

PHOTOS



MECHANICAL DRAWING

Units: mm

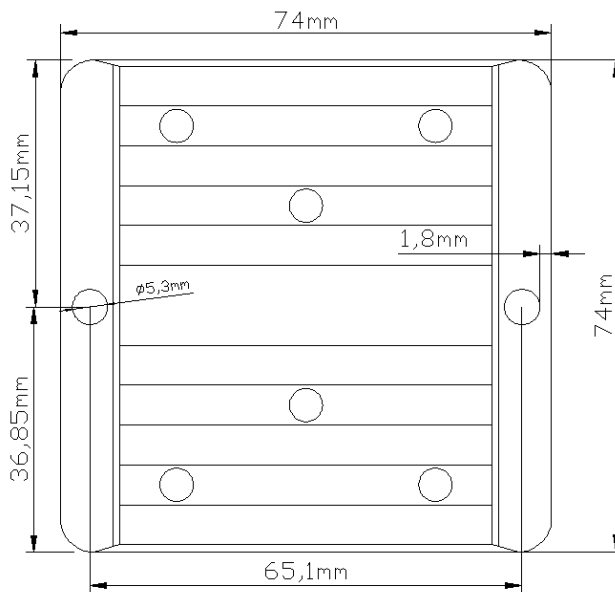


DIAGRAM WIRING

INPUT+ TO BATTERY+

INPUT- TO BATTERY-

OUTPUT+ TO LOAD+

OUTPUT- TO LOAD-

Notes: Never reverse the input polarity, or it burns the converter.

REVISION HISTORY

rev.	description	date
1.0	initial release	5/4/2014
2.0	revision	November 21, 2017

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Power conversion solutions from 1W to 50kW