

# EC3SCW

S E R I E S

## 20-30 WATT 4:1 INPUT RANGE DC-DC CONVERTERS



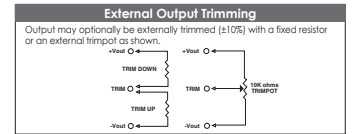
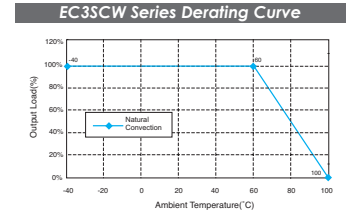
### Features

- 20-30W Isolated Output
- 2" x 1.6" Six-Sided Shield Metal Case
- 4 : 1 Input Range
- Regulated Outputs
- Efficiency to 91%
- Fixed 300KHz Switching Frequency
- Continuous Short Circuit Protection
- Remote On/Off Control

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC3SCW-24S3V3	9-36 VDC	3.3 VDC	0mA	7500mA	50mA	1172mA	87	2" x 1.6"
EC3SCW-24S05		5 VDC		6000mA	60mA	1404mA	89	
EC3SCW-24S12		12 VDC		2500mA	80mA	1374mA	91	
EC3SCW-24S15		15 VDC		2000mA	50mA	1374mA	91	
EC3SCW-48S3V3	18-75 VDC	3.3 VDC	0mA	7500mA	30mA	586mA	88	2" x 1.6"
EC3SCW-48S05		5 VDC		6000mA	30mA	694mA	90	
EC3SCW-48S12		12 VDC		2500mA	40mA	687mA	91	
EC3SCW-48S15		15 VDC		2000mA	50mA	687mA	91	

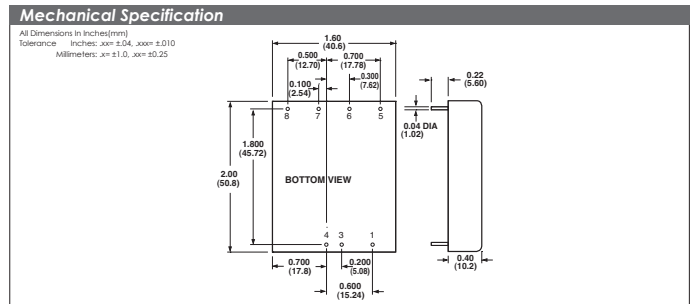
NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specifications	
<b>INPUT SPECIFICATIONS:</b>	
Input Voltage Range.....	24V.....9.36V 48V.....18.75V
Under Voltage lockout.....	24Vin Power Up.....8.8V Typ. 24Vin Power Down.....8.0V Typ. 48Vin Power Up.....1.7V Typ. 48Vin Power Down.....1.6V Typ.
Positive Logic Remote ON/OFF (see note 3 & 4)	PI Type
Input Filter.....	PI Type
<b>OUTPUT SPECIFICATIONS:</b>	
Voltage Accuracy.....	±1.5% max.
Transient Response: 75% - 100% Step Load Change	
Error Band.....	±5% Vout Nominal
Recovery Time.....	<300us
External Adjustment Range, %Vo.....	±10%
Ripple & Noise, 20MHz BW (Measured with 0.1µF MLCC)	
3.3V & 5V.....	20mV RMS, max. 75mV pk-pk, max.
12V & 15V.....	20mV RMS, max. 100mV pk-pk, max.
Temperature Coefficient.....	±0.02%/°C
Line Regulation.....	±0.05% max.
Load Regulation.....	±0.05% max.
Output Over Voltage Protection (Zener or TVS Clamp)	
3.3V.....	3.9V
5V.....	6.2V
12V.....	15V
15V.....	18V
Output Current Limit, % Nominal Output.....	110% - 150%
Output Short Circuit Protection.....	Continuous (Hiccup Mode)
<b>GENERAL SPECIFICATIONS:</b>	
Efficiency.....	See Table
Isolation Voltage.....	Input/Output.....1500VDC max.
Isolation Resistance.....	10 <sup>9</sup> Ohm min.
Switching Frequency.....	24Vin.....300KHz Typ. 48Vin.....250KHz Typ.
Operating Ambient Temperature.....	-40°C to +85°C
De-Rating Above 60°C.....	Linearly to Zero Power at 100°C
Case Temperature.....	100°C max.
Cooling.....	Natural Convection
Storage Temperature.....	-55°C to +125°C
Thermal Shutdown, Case Temperature.....	110°C Typ.
Dimensions:	
Metal Case.....	2.00 x 1.60 x 0.40 inches (50.8 x 40.6 x 10.2mm)
Metal Case Material.....	Black Coated Copper with Non-Conductive Base



- NOTE:**
1. Measured From High Line to Low Line
  2. Measured From Full Load to 10% Load
  3. Logic Compatibility.....CMOS or Open Collector TTL, ref. to -Vin  
Module ON.....>3.5VDC to 75VDC or Open Circuit  
Module OFF.....<-1.2VDC
  4. Suffix 'N' to the Model Number with Negative Logic Remote ON/OFF  
Module ON.....>3.5VDC to 75VDC or Open Circuit  
Module OFF.....<-1.2VDC
  5. Maximum case temperature under any operating condition should not exceed 100°C.

PIN CONNECTION	
Pin	Function
1	On/Off Control
3	-V Input
4	+V Input
5	Trim
6	-V Output
7	+V Output
8	No Pin



All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.