

# ALL PSU DATA SHEET.

## 200 Watt Single Output, Encapsulated DC/DC-converter SI200W1 Series.

Page 1 of 2

- Output Power 200W max.
  - Input / Output Galvanically Isolated
  - Filtering At Input
  - Overload And Overtemperature Protected
  - Copper Case
  - For High Ambient Temperatures (125°C) And Long Life
  - Wide Input Range
  - Overvoltage Protection
  - Senselines
  - With Pin Or Faston Connection
  - According To EN 50155 For Rail Applications.
- Chassis Mount Version With Option  
Of Faston Terminals Available.

### Standard Models, (Alternative Input Or Output Options May Be Available).

|                           |            |     |     |      |
|---------------------------|------------|-----|-----|------|
| Input Voltage Range       | + / - 25 % |     |     |      |
| Input Voltage Order Code  | 2          | 4   | 5   | 7    |
| Input Voltage DC          | 12V        | 24V | 48V | 110V |
| Input To Output           | Isolated   |     |     |      |
| Output Power Rating       | Max. 200 W |     |     |      |
| Output Voltage Order Code | 1          | 2   | 3   | 4    |
| Output Voltage            | 5V         | 12V | 15V | 24V  |
| Output Current            | 30A        | 16A | 13A | 8A   |
| Accuracy                  | Typ.1%     |     |     |      |

(At 12V input voltage max. 75 % output power)

### Specification

(after warm-up-time at 25°C)

|  |  |
|--|--|
| Input Voltage Range @ Full Load                              | 12 VDC ( 9V-18V )<br>24 VDC ( 18V-36V )<br>48 VDC ( 36V-60V )<br>60 VDC ( 36V-72V )<br>110VDC ( 83V-130V ) |
| Output Voltage Accuracy @ 50% Load                           | typ 1%   |
| Short Circuit Current  | I <sub>out</sub> + 10%   |
| Regulation   |  |
| - Load Variation 10-90 % static                              | typ. 1.0% (max 2.0 %)  |
| - Input Voltage Variation                                    | typ. 0.5% (max 1.0 %)  |
| - Recovery Time  | 100 μs (max. 500μs)  |
| - Efficiency @ Full Load Nominal<br>Input 12 V / Output 24 V | min. 85%   |
| - Reflected Output Ripple                                    | 1% pp.max.   |
| - Input Ripple   | 1% pp max.   |
| - Storage Temperature Range                                  | -40°C...+125°C   |
| - Operating Temperature                                      | -40°C...+125°C (Case).   |
| - Derating Above 85°C Case                                   | 2.5 % / °C   |
| - Temperature Coefficient                                    | 0.02 % °C  |
| - Humidity   | 100 % RH   |
| - Thermal Limit  | ca / approx 125* C   |
| - Ingress Protection System                                  | IP68   |

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## Cont... 200 Watt Single Output Encapsulated DC-DC Converter, SI200W1 Series

Page 2 of 2

|                                     |                   |
|-------------------------------------|-------------------|
| - Isolation Input / Output          | 1000 VDC / 1 min. |
| - Isolation Capacity Input / Output | typ.100 pF *      |
| - Isolation Resistor                | 1G Ohm            |
| * with anti-interference capacitor  | ca. 1nF           |

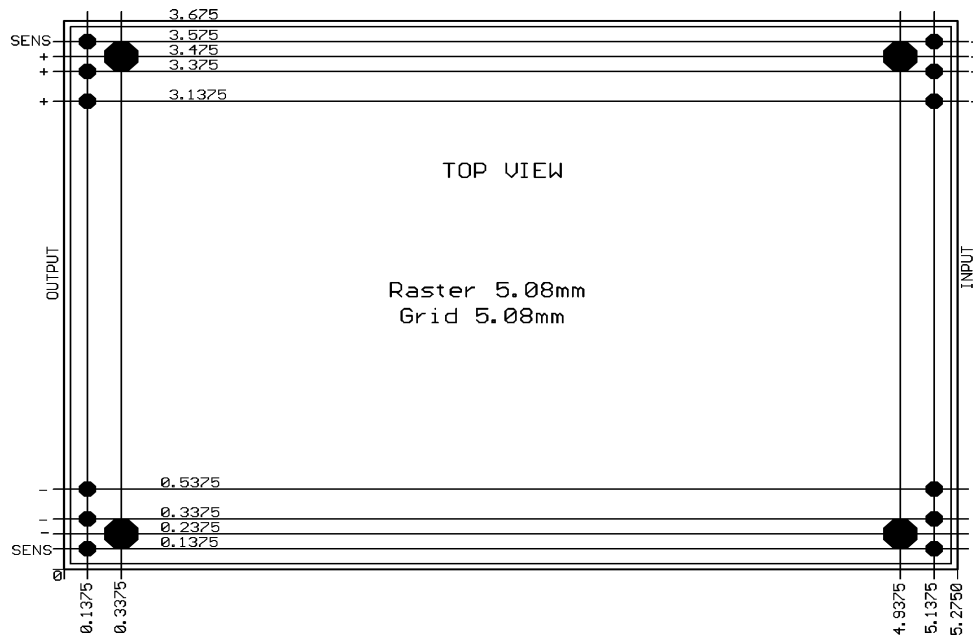
|                          |                  |
|--------------------------|------------------|
| - Overvoltage Protection | Standard         |
| - 5V output              | ca / approx. 7V  |
| - 12V output             | ca / approx. 16V |
| - 15V output             | ca / approx. 19V |
| - 24V output             | ca / approx. 29V |
| - Release Time           | ∴ 2μs            |

### Electromagnetic Compatibility

|                          |  |
|--------------------------|--|
| Radio Interference       | EN 55022-A, EN50121-3-2                |
| Radio Immunity           | EN 61000-4-2, EN61000-4-4, EN61000-4-5 |
| Electrostatic Discharges | 8kV air, 6kV contact                   |

### Pin-Out (Dimensions in inches)

PCB Version Shown, Please Contact ALL PSU For Drawing Of Chassis Mount Option  
And Additional Heat-Sink.



#### Order Example

**SI200W1 - 4 2**

Input = 24 Volts, Output = 12 Volts

200 Watt Unit Also Has Additional Heatsink With Mounting Flanges, Total Size 154.5 x 94 x 51mm.

#### Dimensions

L-134mm x B-94mm x H-18mm (+ Heat-Sink)

Weight Approx 600 g.

Pin Diametre Approx.: 1.4mm

#### Notes

Other Input / Output Voltages Or Special Modules On Request.

Higher Output Currents On Request.

Higher Break Down Voltage (Input / Output) On Request..

The Units Are Available With Earth-Pin On Request.

Subject To Technical Changes.

Specifications May Change Without Notice, E&OE.

*Other Units In This Range Are Available From 3 Watts Upwards.*

*Further Details Can Be Seen At [www.allpsu.co.uk](http://www.allpsu.co.uk)*

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