

30 Watt, ST30 Series, DC-DC Converter, (Single or Dual Output)

ALL PSU LTD
Electronic Power Solutions

- Wide 2:1 Input Ranges
- Built In EMI Filter
- Isolated Output 1600 Volts
- Compact Encapsulated 2 x 1" Case
- Remote on/off Control
- Output Trim
- Short Circuit Protection
- High Efficiency Up To 90%
- 2 Year Warranty



Size 50.8 x 25.4 x 11 mm

Specification

Input Range.....	2:1 wide input, 18~36 or 36~75 Volts DC
Output.....	Single or dual, see table below
Output Trim.....	Single Output models (except 24 Volts Output)
Line Regulation.....	+/-0.5%, across full input range
Load Regulation.....	+/-1% (from 10~100% load)
Efficiency.....	84% to 90% dependent on model
Switching Frequency.....	400 kHz
Short Circuit Protection.....	Current Limit, auto-recovery
I/P~O/P Isolation Voltage.....	1600 VDC, all models
Operating Temperature.....	-40~+85 °C, (see derating curve)
Cooling.....	Free air convection
Storage Temperature.....	-55 ~ +105 °C
Case Material.....	Aluminium, (Base: plastic) (5 sided shield)
MTBF.....	>550 khrs (MIL-HDBK-217F) @ 25 °C
Weight.....	33 g

Models and Ratings

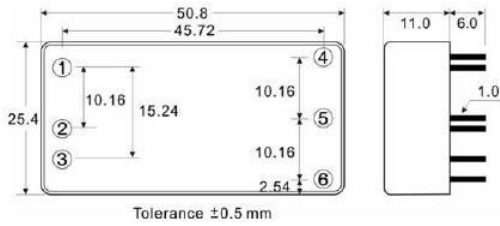
Model	Input VDC	Output 1	Output 2	Efficiency
ST30-24-2.5S	18~36	2.5 V, 6.0 A		84%
ST30-24-3.3S	18~36	3.3 V, 6.0 A		87%
ST30-24-5S	18~36	5.0 V, 6.0 A		90%
ST30-24-12S	18~36	12.0 V, 2.5 A		88%
ST30-24-15S	18~36	15.0 V, 2.0 A		88%
ST30-24-24S	18~36	24.0 V, 1.25 A		88%
ST30-24-5D	18~36	+5.0 V, 2.4 A	-5.0 V, 2.4 A	85%
ST30-24-12D	18~36	+12.0 V, 1.25 A	-12.0 V, 1.25 A	88%
ST30-24-15D	18~36	+15.0 V, 1.0 A	-15.0 V, 1.0 A	88%
ST30-48-2.5S	36~75	2.5 V, 6.0 A		85%
ST30-48-3.3S	36~75	3.3 V, 6.0 A		88%
ST30-48-5S	36~75	5.0 V, 6.0 A		90%
ST30-48-12S	36~75	12.0 V, 2.5 A		88%
ST30-48-15S	36~75	15.0 V, 2.0 A		88%
ST30-48-24S	36~75	24.0 V, 1.25 A		88%
ST30-48-5D	36~75	+5.0 V, 2.4 A	-5.0 V, 2.4 A	85%
ST30-48-12D	36~75	+12.0 V, 1.25 A	-12.0 V, 1.25 A	88%
ST30-48-15D	36~75	+15.0 V, 1.0 A	-15.0 V, 1.0 A	88%

Please See Next Page For Mechanical Drawing & Pin Out

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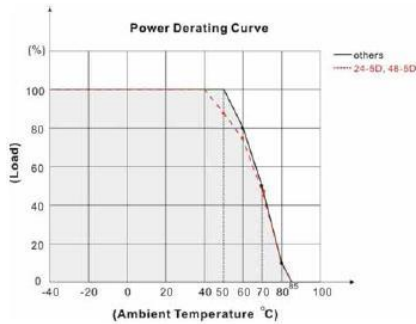
Mechanical Drawing and Pin-Out (Top View)



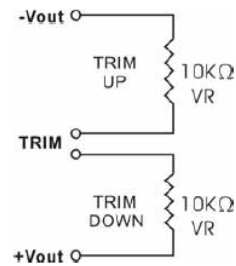
Pin No.	Function		
	Single Output	Dual Output	Single 24 V Output
1	Remote On/Off	Remote On/Off	Remote On/Off
2	- V in	- V in	- V in
3	+V in	+ V in	+V in
4	Trim	-DC Out	N/C
5	-DC Out	Common	-DC Out
6	+DC Out	+DC Out	+DC Out

N/C means pin present but no connection

Output Power Derating



Output Trim



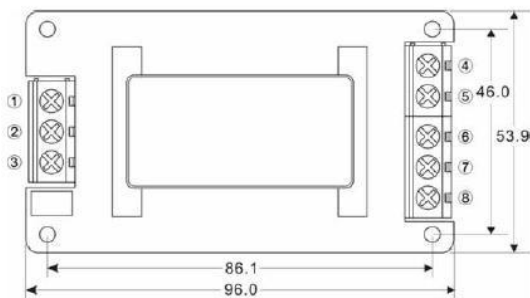
Notes:

Positive logic remote on/off turns the module on during a logic high voltage on the remote on/off pin and off during a logic low.

To turn the power module on and off, the user must supply a switch to control the voltage between the on/off pin and the -V in pin, If Remote function is not required the control pin can be left open for normal "on" operation.

Alternate Mounting Method

Two styles of chassis mount adapters are available for use where a pcb is not available, add "-A2" to the end of the part number for the version shown below with screw terminals for stripped wires (contact ALL PSU sales for prices), Alternative adaptor with screw terminals for crimped terminals is also available as option -A5



-A2 Screw Terminal Adaptor Shown.
Contact ALL PSU for connection details.



Specifications may change without notice, E&OE. ALL PSU Terms & Conditions apply.