

10 Watt, ST10 Series, DC-DC Converter, (Single & Dual Outputs)

ALL PSU LTD
Electronic Power Solutions

- Wide 2:1 & Extra Wide 4:1 Input Ranges
- Built In EMI Filter
- Isolated Output 1600 Volts
- Low Profile Encapsulated 2 x 1" Case
- Optional Remote on/off Control
- CE Marked & UL Approval
- Short Circuit Protection
- 2 Year Warranty



Size 50.1 x 25.4 x 10.8 mm

Specification

| | |
|--------------------------------|---|
| Input Range..... | 2 : 1 wide input, 9~18, 18~36 or 36~75 Volts DC 4 : 1 extra wide input 10~40 or 18~75 Volts DC |
| Output..... | Single and Dual outputs, see table below |
| Line Regulation..... | +/-0.5% |
| Load Regulation..... | +/-1% |
| Efficiency..... | 66% to 85% dependent on model (see models table) |
| Short Circuit Protection..... | Current limit, auto-recovery |
| I/P~O/P Isolation Voltage..... | 1600 VDC, all models |
| Operating Temperature..... | -25~+100 °C, see derating curve |
| Cooling..... | Free air convection |
| Storage Temperature..... | -55 ~ +105 °C |
| Case Material..... | Nickel coated Copper, non conductive base, 6 sided shield |
| MTBF..... | >800 khrs (MIL-HDBK-217F) @ 25 °C |

Models and Ratings (Single Outputs, please see below for Dual Outputs)

| Model | Input VDC | Output Volts | Output Current | Efficiency |
|---------------|-----------|--------------|----------------|------------|
| ST10-12-3.3S | 9~18 | 3.3 V | 2.0 A | 74% |
| ST10-12-5S | 9~18 | 5 V | 2.0 A | 80% |
| ST10-12-12S | 9~18 | 12 V | 0.83 A | 81% |
| ST10-12-15S | 9~18 | 15 V | 0.67 A | 82% |
| ST10-12-24S | 9~18 | 24 V | 0.42 A | 81% |
| ST10-24-3.3S | 18~36 | 3.3 V | 2.0 A | 74% |
| ST10-24-5S | 18~36 | 5 V | 2.0 A | 81% |
| ST10-24-12S | 18~36 | 12 V | 0.83 A | 84% |
| ST10-24-15S | 18~36 | 15 V | 0.67 A | 85% |
| ST10-24-24S | 18~36 | 24 V | 0.42 A | 84% |
| ST10-48-3.3S | 36~75 | 3.3 V | 2.0 A | 76% |
| ST10-48-5S | 36~75 | 5 V | 2.0 A | 81% |
| ST10-48-12S | 36~75 | 12 V | 0.83 A | 84% |
| ST10-48-15S | 36~75 | 15 V | 0.67 A | 84% |
| ST10-48-24S | 36~75 | 24 V | 0.42 A | 84% |
| ST10-24F-3.3S | 10~40 | 3.3 V | 2.0 A | 67% |
| ST10-24F-5S | 10~40 | 5 V | 2.0 A | 75% |
| ST10-24F-12S | 10~40 | 12 V | 0.83 A | 75% |
| ST10-24F-15S | 10~40 | 15 V | 0.67 A | 75% |
| ST10-48F-3.3S | 18~75 | 3.3 V | 2.0 A | 66% |
| ST10-48F-5S | 18~75 | 5 V | 2.0 A | 75% |
| ST10-48F-12S | 18~75 | 12 V | 0.83 A | 77% |
| ST10-48F-15S | 18~75 | 15 V | 0.67 A | 75% |

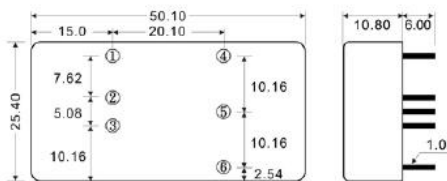
Please See Next Page For Dual Output Models, Mechanical Drawing & Pin Out

ALL PSU Ltd, Unit D6 Laser Quay, Culpeper Close, Medway City Estate,
Rochester, Kent, ME2 4HU, Tel : 01634 725527, Fax : 01634 739111
Email : sales@allpsu.co.uk, Web : www.allpsu.co.uk

Dual Output Models.

| Model | Input VDC | Output 1 | Output 2 | Efficiency |
|--------------|-----------|-----------------|-----------------|------------|
| ST10-24F-5D | 10~40 | + 5 V / 1.0 A | -5 V / 1.0 A | 75% |
| ST10-24F-12D | 10~40 | +12 V / 0.415 A | -12 V / 0.415 A | 75% |
| ST10-24F-15D | 10~40 | +15 V / 0.333 A | -15 V / 0.333 A | 75% |
| ST10-48F-5D | 18~75 | +5 V / 1.0 A | -5 V / 1.0 A | 75% |
| ST10-48F-12D | 18~75 | +12 V / 0.415 A | -12 V / 0.415A | 77% |
| ST10-48F-15D | 18~75 | +15 V / 0.333 A | -15 V / 0.333 A | 77% |

Mechanical Drawing and Pin-Out (Top View)

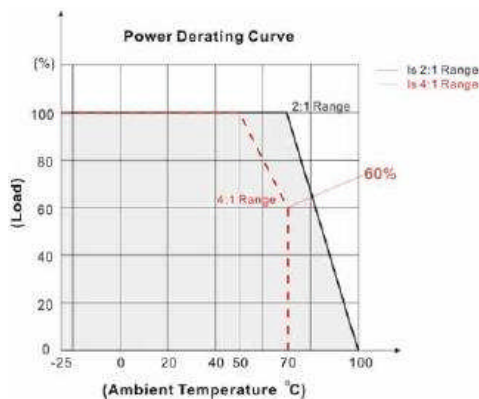


| Pin | Single Output | Dual Output |
|-----|---------------|---------------|
| 1 | Remote On/Off | Remote On/Off |
| 2 | - V in | - V in |
| 3 | +V in | + V in |
| 4 | -DC Out | -DC Out |
| 5 | No Pin | Common |
| 6 | +DC Out | +DC Out |

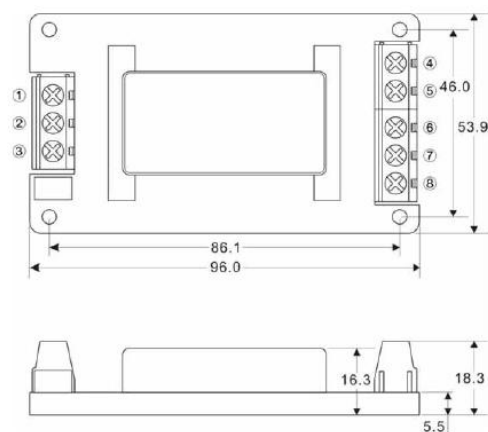
Pin 1, Remote on/off is optional

For remote option add suffix -R to end of unit part number, eg: ST10-24-12S-R

DERATING



Screw terminal adaptor boards are also available for chassis mounting of the DC-DC Converter if required.



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

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