

P 10

P 10 Watt Series DC/DC Converters

Total power 10 Watts
Input voltages 5V, 12V, 24V, 48V Input
#of outputs Single, Dual Output



SPECIAL FEATURES

- CE(LVD) Marking
- High efficiency
- 300KHz fixed frequency
- Wide 2:1 input range
- Isolated output
- Surface mounting technology
- Small, compact size 1.85" × 1.65" × 0.35"
- Current mode control
- Low output ripple & noise
- Low start up current
- 3 years warranty

ENVIRONMENTAL

- Operating temperature range -20 °C ~ 71 °C
- Option, see Note 1 -40 °C ~ 85 °C
- Storage temperature range -40 °C ~ 105 °C
- Operating humidity (non condensing) 20%~90%RH
- Storage humidity (non condensing) 10%~95%RH
- Cooling method Convection
- Case material Zn
- MTBF 4.8×10^5 hrs
- Safety(Single output) CE (EN 60950)
*Approved through TÜV

ELECTRICAL SPECIFICATIONS

INPUT	<ul style="list-style-type: none"> • Input range 4.5V to 7.2 VDC, 8V to 16.5 VDC, 18 to 32 VDC, 32V to 63 VDC • Efficiency 72 ~ 83% typ.
OUTPUT	<ul style="list-style-type: none"> • Voltage tolerance $\pm 2\%$ (Single and uncomplementary dual) $\pm 3\%$ (Complementary dual) • Line regulation $\pm 0.5\%$ • Load regulation $\pm 1\%$ @ single $\pm 2.5\%$ @ dual (minimum load 10%) • Ripple and Noise, pk-pk Bandwidth : 20MHz Magnitude : 1% Vout nom
PROTECTION CIRCUIT	<ul style="list-style-type: none"> • Short circuit protection Current limited output (note2)
ELECTRICALLY ISOLATED	<ul style="list-style-type: none"> • Isolation Input-output, input-case, output-case / DC 500V, 100Mohms • High pot Input-output, input-case, output-case / AC 500V, 1minute

NOTE 1. As a factory added option, the all model can be operated down to -40°C, the suffix 'M' should be added to the model number when ordering ex) PS10-24-5M
 2. Long term continuous operation into a short circuit will compromise the reliability of the unit

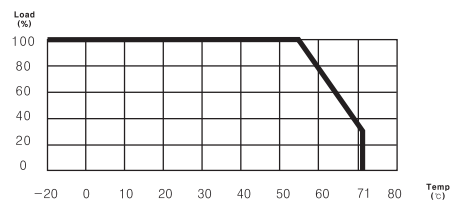
Ordering Information

Input	Output1	Output2	Maximum Power	Ripple&Noise max	Efficiency Typ.	Model Number
4.5 - 7.2V	3.3V@1.60A		5.28W	50mVp-p	77%	PS10-5-3R3
4.5 - 7.2V	5V@1.60A		8.0W	50mVp-p	79%	PS10-5-5
4.5 - 7.2V	12V@0.70A		8.4W	120mVp-p	81%	PS10-5-12
4.5 - 7.2V	15V@0.60A		9.0W	150mVp-p	81%	PS10-5-15
4.5 - 7.2V	+12V@0.35A	-12V@0.35A	8.4W	120/120mVp-p	81%	PD10-5-1212
4.5 - 7.2V	+15V@0.30A	-15V@0.30A	9.0W	150/150mVp-p	81%	PD10-5-1515
4.5 - 7.2V	+5V@0.90A	+12V@0.40A	9.3W	75/120mVp-p	78%	PD10-5-0512
4.5 - 7.2V	+5V@0.90A	+15V@0.32A	9.3W	75/150mVp-p	78%	PD10-5-0515
8 - 16.5V	3.3V@2.00A		6.6W	50mVp-p	80%	PS10-12-3R3
8 - 16.5V	5V@2.00A		10.0W	50mVp-p	82%	PS10-12-5
8 - 16.5V	12V@0.90A		10.8W	120mVp-p	82%	PS10-12-12
8 - 16.5V	15V@0.70A		10.5W	150mVp-p	82%	PS10-12-15
8 - 16.5V	+12V@0.45A	-12V@0.45A	10.8W	120/120mVp-p	82%	PD10-12-1212
8 - 16.5V	+15V@0.35A	-15V@0.35A	10.5W	150/150mVp-p	82%	PD10-12-1515
8 - 16.5V	+5V@0.90A	+12V@0.40A	9.3W	75/120mVp-p	72%	PD10-12-0512
8 - 16.5V	+5V@0.90A	+15V@0.32A	9.3W	75/150mVp-p	72%	PD10-12-0515
18 - 32V	3.3V@2.00A		6.6W	50mVp-p	80%	PS10-24-3R3
18 - 32V	5V@2.00A		10.0W	50mVp-p	82%	PS10-24-5
18 - 32V	12V@0.90A		10.8W	120mVp-p	85%	PS10-24-12
18 - 32V	15V@0.70A		10.5W	150mVp-p	83%	PS10-24-15
18 - 32V	+12V@0.45A	-12V@0.45A	10.8W	120/120mVp-p	83%	PD10-24-1212
18 - 32V	+15V@0.35A	-15V@0.35A	10.5W	150/150mVp-p	83%	PD10-24-1515
18 - 32V	+5V@0.90A	+12V@0.40A	9.3W	75/120mVp-p	73%	PD10-24-0512
18 - 32V	+5V@0.90A	+15V@0.32A	9.3W	75/150mVp-p	73%	PD10-24-0515
32 - 63V	3.3V@2.00A		6.6W	50mVp-p	80%	PS10-48-3R3
32 - 63V	5V@2.00A		10.0W	50mVp-p	82%	PS10-48-5
32 - 63V	12V@0.90A		10.8W	120mVp-p	82%	PS10-48-12
32 - 63V	15V@0.70A		10.5W	150mVp-p	82%	PS10-48-15
32 - 63V	+12V@0.45A	-12V@0.45A	10.8W	120/120mVp-p	82%	PD10-48-1212
32 - 63V	+15V@0.35A	-15V@0.35A	10.5W	150/150mVp-p	82%	PD10-48-1515
32 - 63V	+5V@0.90A	+12V@0.40A	9.3W	75/120mVp-p	75%	PD10-48-0512
32 - 63V	+5V@0.90A	+15V@0.32A	9.3W	75/150mVp-p	75%	PD10-48-0515

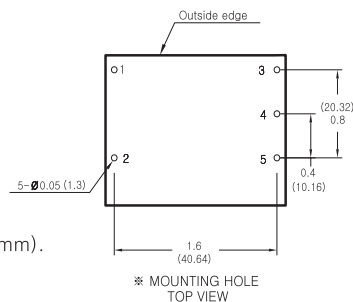
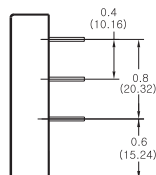
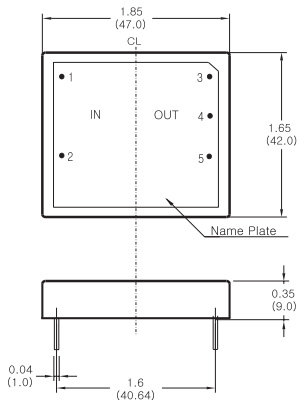
Pin assignments

Single Output	Dual Output
1. +Vin	1. +Vin
2. - Vin	2. - Vin
3. +Vout	3. Output1
4. No pin	4. COM
5. -Vout	5. Output2

Derating curve



Dimensions



NOTES

1. All dimensions are in inches and (mm).
2. Weight : 35g or less