

P 15

P 15 Watt Series DC/DC Converters

Total power 15 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
- Surface mounting technology
- Small, compact size 1.8"×2.0"×0.35"
- Remote on / off control
- Output voltage variation (TRM)
- Over voltage protection (OVP)
- Low output ripple & noise
- Current mode control
- Low start up current
- Isolated output
- 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 5.2×10^5 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 76 ~ 86% typ. • Remote on / off TTL compatible on : 0 to 1.2 VDC or short Vin-V off : 2.4 to 5.5 VDC or open
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 • 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) • Over voltage protect Work at 115 ~ 140% of rating
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, 1 minute

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) PS15-24-5M
 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@2.0A		6.6W	75mVp-p	76%	PS15-5-3R3
4.5 - 7.2V	5V@2.0A		10.0W	75mVp-p	78%	PS15-5-5
4.5 - 7.2V	12V@1.0A		12.0W	120mVp-p	80%	PS15-5-12
4.5 - 7.2V	15V@0.8A		12.0W	150mVp-p	80%	PS15-5-15
4.5 - 7.2V	+5V@1.0A	-5V@1.0A	10.0W	120/120mVp-p	80%	PD15-5-55
4.5 - 7.2V	+12V@0.5A	-12V@0.5A	12.0W	150/150mVp-p	80%	PD15-5-1212
4.5 - 7.2V	+15V@0.4A	-15V@0.4A	12.0W	150/150mVp-p	80%	PD15-5-1515
8 - 16.5V	3.3V@2.4A		7.92W	75mVp-p	83%	PS15-12-3R3
8 - 16.5V	5V@2.4A		12.0W	75mVp-p	85%	PS15-12-5
8 - 16.5V	12V@1.2A		14.4W	120mVp-p	85%	PS15-12-12
8 - 16.5V	15V@1.0A		15.0W	150mVp-p	85%	PS15-12-15
8 - 16.5V	+5V@1.5A	-5V@1.5A	15.0W	120/120mVp-p	85%	PD15-12-55
8 - 16.5V	+12V@0.6A	-12V@0.6A	14.4W	150/150mVp-p	85%	PD15-12-1212
8 - 16.5V	+15V@0.5A	-15V@0.5A	15.0W	150/150mVp-p	85%	PD15-12-1515
18 - 32V	3.3V@2.4A		7.92W	75mVp-p	84%	PS15-24-3R3
18 - 32V	5V@2.4A		12.0W	75mVp-p	86%	PS15-24-5
18 - 32V	12V@1.2A		14.4W	120mVp-p	86%	PS15-24-12
18 - 32V	15V@1.0A		15.0W	150mVp-p	86%	PS15-24-15
18 - 32V	+5V@1.5A	-5V@1.5A	15.0W	120/120mVp-p	86%	PD15-24-55
18 - 32V	+12V@0.6A	-12V@0.6A	14.4W	150/150mVp-p	86%	PD15-24-1212
18 - 32V	+15V@0.5A	-15V@0.5A	15.0W	150/150mVp-p	86%	PD15-24-1515
32 - 63V	3.3V@2.4A		7.92W	75mVp-p	78%	PS15-48-3R3
32 - 63V	5V@2.4A		12.0W	75mVp-p	80%	PS15-48-5
32 - 63V	12V@1.2A		14.4W	120mVp-p	83%	PS15-48-12
32 - 63V	15V@1.0A		15.0W	150mVp-p	83%	PS15-48-15
32 - 63V	+5V@1.5A	-5V@1.5A	15.0W	120/120mVp-p	83%	PD15-48-55
32 - 63V	+12V@0.6A	-12V@0.6A	14.4W	150/150mVp-p	83%	PD15-48-1212
32 - 63V	+15V@0.5A	-15V@0.5A	15.0W	150/150mVp-p	83%	PD15-48-1515

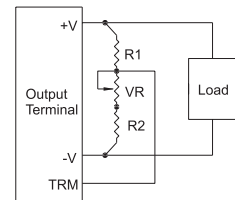
Pin assignments

Single Output	Dual Output
1. +Vin	1. +Vin
2. - Vin	2. - Vin
3. CNT	3. CNT
4. +Vout	4. Output1
5. No pin	5. Com
6. -Vout	6. Output2
7. TRM.	7. TRM.

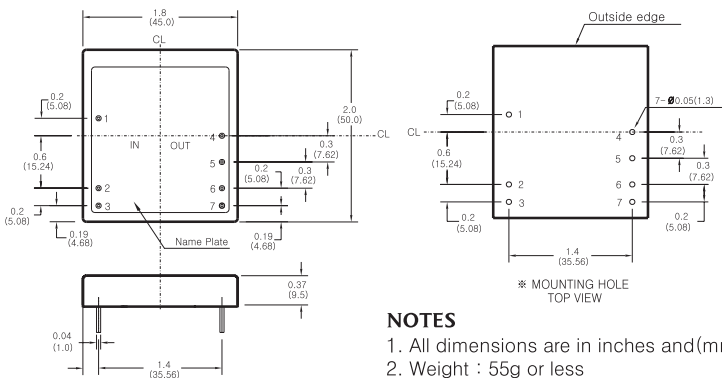
External Parts

Model	Output Voltage	VR	R1	R2
PS 15	5V	1K	1K	680Ω
	12V	1K	3.9K	680Ω
	15V	1K	5.6K	750Ω
PD 15	±5V (10V)	1K	3.3K	680Ω
	±12V (24V)	5K	9.0K	820Ω
	±15V (30V)	5K	20.0K	910Ω

Trim method



Dimensions



Derating curve

