

P10 Series

10W DC-DC CONVERTER



FEATURES 5V, 12V, 24V, 48V Inputs / Single, Dual Outputs

- High Efficiency
- Encapsulated Small / Compact Size
- Wide 2:1 Input Range
- 300kHz Fixed Frequency
- Input / Output Isolation
- Surface Mounting Technology
- Current Mode Control
- Output Low Ripple / Noise
- Low Start up Current
- 3 Year Warranty

ELECTRICAL SPECIFICATIONS

Input	<ul style="list-style-type: none"> · Input Range DC 5V(4.5 - 7.2), 12V(8 - 16.5), 24V(18 - 32), 48V(32 - 63) · Efficiency 72 - 85% Typ.
Output	<ul style="list-style-type: none"> · Output Voltages 3.3V, 5V, 12V, 15V, ±12V, ±15V, +5V/+12V, +5V/+15V · Output Voltage Tolerance ±2.0% (Single and Uncomplementary Dual), ±3.0% (Complementary Dual) · Line Regulation ±0.5% Max. · Load Regulation ±1.0% Max. (Single), ±2.5% Max. (Complementary Dual : Minimum Load 10%) ±1.0% Max. (Dual : Output1), ±4.0% Max. (Dual : Output2) · Ripple and Noise 1% of Vout (Bandwidth : 20MHz)
Protection Circuit	<ul style="list-style-type: none"> · Over Current Protection Work Over 105% of Rating (Current Limited Output) (NOTE 1)
Electrically Isolated	<ul style="list-style-type: none"> · Isolation Input-Output, Input-Case, Output-Case / DC500V, 100MΩ · High Pot Input-Output, Input-Case, Output-Case / AC500V, 1Min.

ENVIRONMENTAL

· Operating Temperature Range -20°C ~ 71°C
· Option, See NOTE 2 -40°C ~ 85°C
· Operating Humidity (Non-Condensing) 20% ~ 90%RH
· Storage Temperature Range -40°C ~ 105°C
· Storage Humidity (Non-Condensing) 10% ~ 95%RH
· Cooling Method Convection
· MTBF (MIL-HDBK-217F) 4.8 x 10 ⁵ hrs
· Safety (Single Output) CE_LVD (EN 60950) through TÜV

NOTE 1. Long term continuous operation into a short circuit will compromise the reliability of the unit.
 2. As a factory added option, the all model can be operated from -40°C to 85°C, the suffix 'M' should be added to the model number when ordering. ex) PS10-24-5M

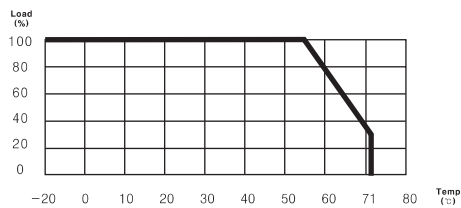
ORDERING INFORMATION

Input	Output1	Output2	Maximum Power	Ripple&Noise Max.	Efficiency Typ.	Model Number
4.5 - 7.2V	3.3V@1.60A		5.28W	50mVp-p	76%	PS10-5-3R3
4.5 - 7.2V	5V@1.60A		8.00W	50mVp-p	77%	PS10-5-5
4.5 - 7.2V	12V@0.70A		8.40W	120mVp-p	81%	PS10-5-12
4.5 - 7.2V	15V@0.60A		9.00W	150mVp-p	81%	PS10-5-15
4.5 - 7.2V	+12V@0.35A	-12V@0.35A	8.40W	120/120mVp-p	80%	PD10-5-1212
4.5 - 7.2V	+15V@0.30A	-15V@0.30A	9.00W	150/150mVp-p	78%	PD10-5-1515
4.5 - 7.2V	+5V@0.90A	+12V@0.40A	9.30W	75/120mVp-p	78%	PD10-5-0512
4.5 - 7.2V	+5V@0.90A	+15V@0.32A	9.30W	75/150mVp-p	78%	PD10-5-0515
8 - 16.5V	3.3V@2.00A		6.60W	50mVp-p	80%	PS10-12-3R3
8 - 16.5V	5V@2.00A		10.00W	50mVp-p	81%	PS10-12-5
8 - 16.5V	12V@0.90A		10.80W	120mVp-p	82%	PS10-12-12
8 - 16.5V	15V@0.70A		10.50W	150mVp-p	82%	PS10-12-15
8 - 16.5V	+12V@0.45A	-12V@0.45A	10.80W	120/120mVp-p	83%	PD10-12-1212
8 - 16.5V	+15V@0.35A	-15V@0.35A	10.50W	150/150mVp-p	85%	PD10-12-1515
8 - 16.5V	+5V@0.90A	+12V@0.40A	9.30W	75/120mVp-p	72%	PD10-12-0512
8 - 16.5V	+5V@0.90A	+15V@0.32A	9.30W	75/150mVp-p	72%	PD10-12-0515
18 - 32V	3.3V@2.00A		6.60W	50mVp-p	80%	PS10-24-3R3
18 - 32V	5V@2.00A		10.00W	50mVp-p	82%	PS10-24-5
18 - 32V	12V@0.90A		10.80W	120mVp-p	84%	PS10-24-12
18 - 32V	15V@0.70A		10.50W	150mVp-p	85%	PS10-24-15
18 - 32V	+12V@0.45A	-12V@0.45A	10.80W	120/120mVp-p	83%	PD10-24-1212
18 - 32V	+15V@0.35A	-15V@0.35A	10.50W	150/150mVp-p	83%	PD10-24-1515
18 - 32V	+5V@0.90A	+12V@0.40A	9.30W	75/120mVp-p	74%	PD10-24-0512
18 - 32V	+5V@0.90A	+15V@0.32A	9.30W	75/150mVp-p	73%	PD10-24-0515
32 - 63V	3.3V@2.00A		6.60W	50mVp-p	80%	PS10-48-3R3
32 - 63V	5V@2.00A		10.00W	50mVp-p	83%	PS10-48-5
32 - 63V	12V@0.90A		10.80W	120mVp-p	83%	PS10-48-12
32 - 63V	15V@0.70A		10.50W	150mVp-p	82%	PS10-48-15
32 - 63V	+12V@0.45A	-12V@0.45A	10.80W	120/120mVp-p	82%	PD10-48-1212
32 - 63V	+15V@0.35A	-15V@0.35A	10.50W	150/150mVp-p	83%	PD10-48-1515
32 - 63V	+5V@0.90A	+12V@0.40A	9.30W	75/120mVp-p	75%	PD10-48-0512
32 - 63V	+5V@0.90A	+15V@0.32A	9.30W	75/150mVp-p	75%	PD10-48-0515

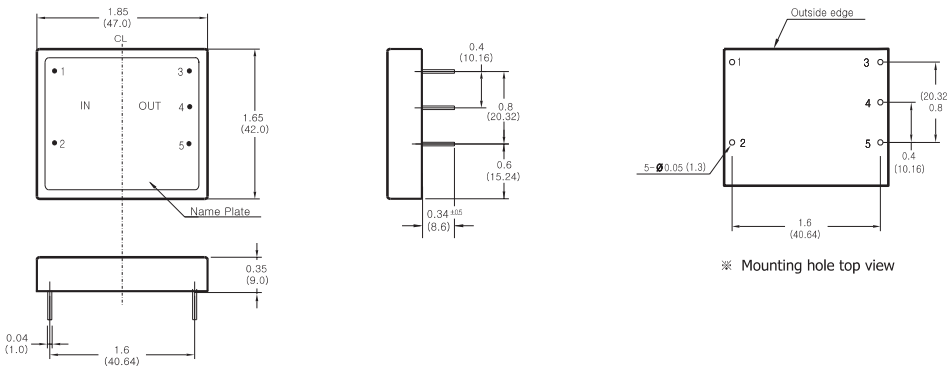
PIN ASSIGNMENTS

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



NOTE 1 All dimension are in inches (mm)
 2 Weight : 45g or less
 3 Case Material : ZnDC