



## AOPS1500

## 1500W AC/DC



### Features

- Small Size
- Built in PFC circuit
- Wide Input voltage range
- 100-240 VAC
- Over voltage protection
- Overcurrent protection
- **5 Yr warranty**



MODEL/CHANNEL		Unit	AOPS 1500-5	AOPS 1500-9	AOPS 1500-12	AOPS 1500-15
OUTPUT	Nominal Voltage	V	5	9	12	15
	Setting Voltage Range	V	4.95~5.05	8.91~9.09	11.88~12.12	14.85~15.15
	Current	A	240	150	125	100
	Rated Power Range	W	1200	1350	1500	1500
	Line Regulations	mV	25	45	60	75
	Load Regulations	mV	100	45	60	75
	Temperature Drift	mV	75	135	180	225
	Ripple& Noise(pk-pk)	mV	150	150	150	150

MODEL/CHANNEL		Unit	AOPS 1500-24	AOPS 1500-28	AOPS 1500-48
OUTPUT	Nominal Voltage	V	24	28	48
	Setting Voltage Range	V	23.76~24.24	27.72~28.28	47.52~48.48
	Current	A	63	54	32
	Rated Power Range	W	1512	1524	1536
	Line Regulations	mV	120	140	240
	Load Regulations	mV	120	140	240
	Temperature Drift	mV	360	420	720
	Ripple& Noise(pk-pk)	mV	150	150	200
	Voltage Adjustment	V	Voltage adjustment trim is +/-15%		
	Start-up, Rise Time typ.	ms	1500 typ., 100 typ., (AC IN 110/220V, lo=100%)		
Hold-up Time typ.	ms	10(AC IN 110V, lo=100%), 15(15 IN 220V, lo=100%)			
INPUT	Voltage, Frequency	V	~240V (AC90~264V), 50/60Hz (43~63) or DC127~370V		
	Current Typ.	110V	14	15	16
		220V	7	7.5	7.8
	Efficiency	110V	78	82	83
		220V	80	85	87
	Current Typ.	110V	16	16	16
		220V	7.8	7.8	7.8
	Efficiency	110V	86	86	87
		220V	90	90	91
	Power Factor	110V	.98 (lo=100%)		
220V		.95 (lo=100%)			

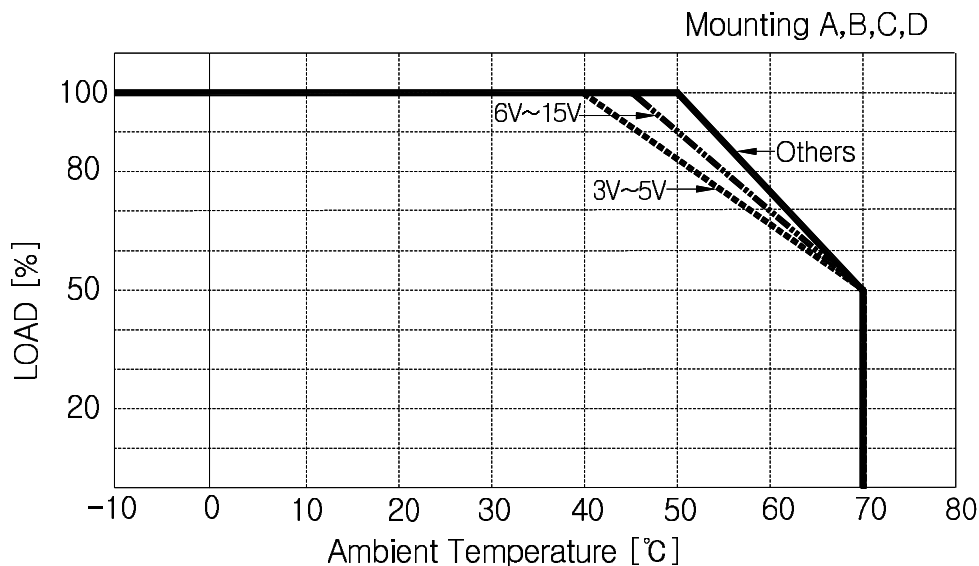




MODEL/CHANNEL		Unit	
<b>Function</b>	Inrush Current Typ. 110V 220V	A	30 (Ta=25°C, Cold Start) 60 (Ta=25°C, Cold Start)
	Leakage Current 110V 1mA Max 220V	mA	0.6 (Typ.) 1(Typ.)
	Over Current Protection	A	Works at 105~135% rating Protection type Constant current limiting unit will shut down afer 5 sec. (Re-power on to reocover)
	Auxiliary Power (AUX)	-	12V/0.1A (only for remote ON/OFF control)
	Remote Sensing	-	Available
	Remote ON.OFF	-	Available
	Alarm Signal	-	POK (Open collector output)
	Cooling/O.T.P	-	Forced air cooling / Fan
<b>Electrical Isolation</b>	(1) Input	-	AC 3 KV 1min., cut-off: 20mA/DC500V 100MO
	(2) Input - F.G	-	AC 2 KV 1min., cut-off: 20mA / DC 500V 100MO
	(3) Output - F.G	-	AC 0.5 KV 1min., cut-off: 100mA / DC 500V 100MO
<b>Environment</b>	Operating temp. & Humidity	-	-10 ~70°C. 20~90% RH (NON condensing)
	Storage temp. Humidity	-	-20 ~85°C. 20~90% RH (NON condensing)
	Vibration	-	10~55Hz @ 1 G 3minutes PERIOD, 30 minutes along X,Y & Z axis
<b>Dimension</b>	Size(WxLxH)/Weight	mm/g	126.5Lx280Wx82H/3800
<b>Safety</b>	CB, CE, RU	-	EN60950-1
<b>Emission</b>	Conducted Emission	-	Complied with EN55022-A
<b>PFHC</b>	Harmonic Content	-	Complied with IEC61000-3-2-3

## Derating Curve

1500W AC/DC



4. Output derating Table

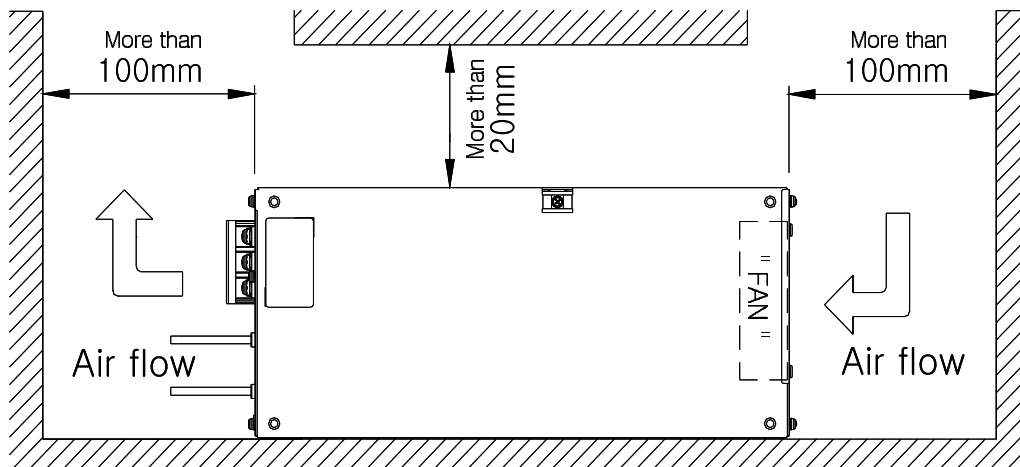
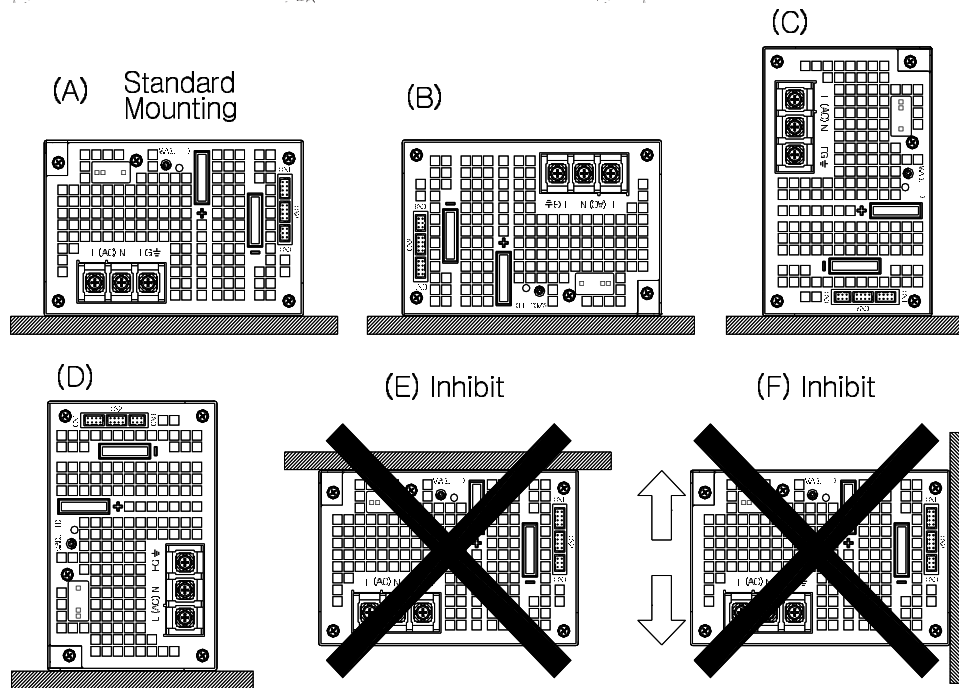
3V~5V Ta(°C)	6V~15V Ta(°C)	Others Ta(°C)	LOAD (%), Mounting			
			A	B	C	D
-10 ~ +40	-10 ~ +45	-10 ~ +50	100	100	100	100
70	70	70	50	50	50	50





## Mechanical Drawings

## 1500W AC/DC





## Mounting

1500W AC/DC

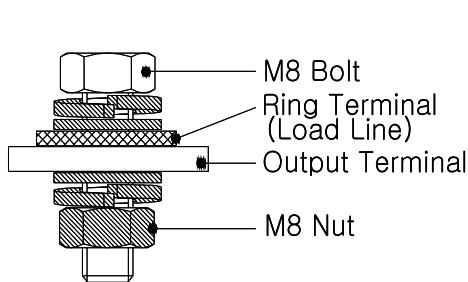
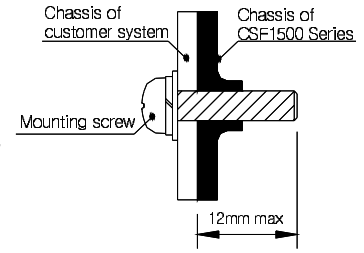
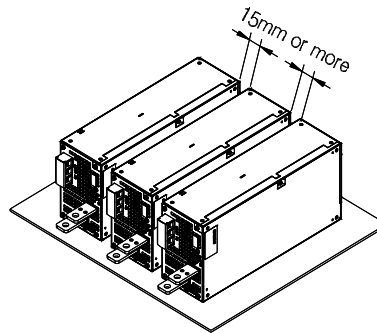


Fig.13 Output terminal & Load line



Mounting Screw

## Mounting

1500W AC/DC

### CN1, CN2 Connector Pin No. Assignment

Connector No.	Pin No.	Assignment	Function
 CN1, CN2	1	RCG	Remote ON/OFF Ground
	2	RC2	Remote ON/OFF
	3,5,7	-S	- Remote Sensing
	4	TRIM	Adjustment of Output Voltage
	6	LS	Load Sharing
	8	+S	+ Remote Sensing

### CN3 Connector Pin No. Assignment

Connector No.	Pin No.	Assignment	Function
 CN3	1	POK GND	Power OK Signal Ground
	2	POK	Power OK Signal
	3	RCG	Remote ON/OFF Ground
	4	AUXG	Auxiliary Output Ground
	5	RC1	Remote ON/OFF
	6	AUX	Auxiliary Output (12V/0.1A)

② +V : + Output Terminal (M8 Bolts, M4 Screw x 2EA)

③ -V : - Output Terminal (M8 Bolts, M4 Screw x 2EA)

④ CN1  
⑤ CN2  
⑥ CN3 } Control Connector

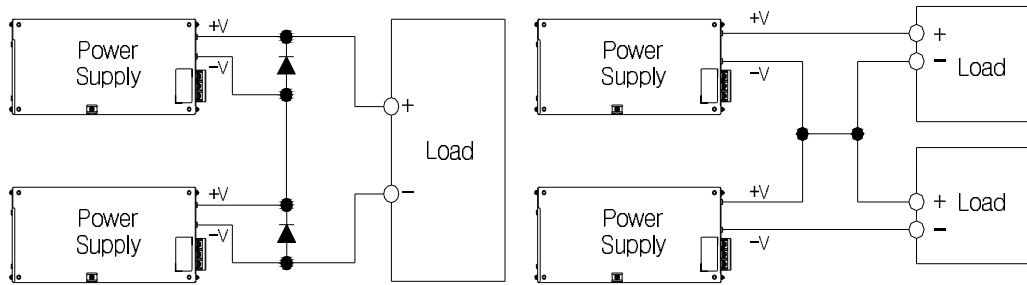
Connector	Housing	Terminal
CN1, CN2	Molex 511100850	Molex 503948051
CN3	Molex 511100650	Molex 503948051





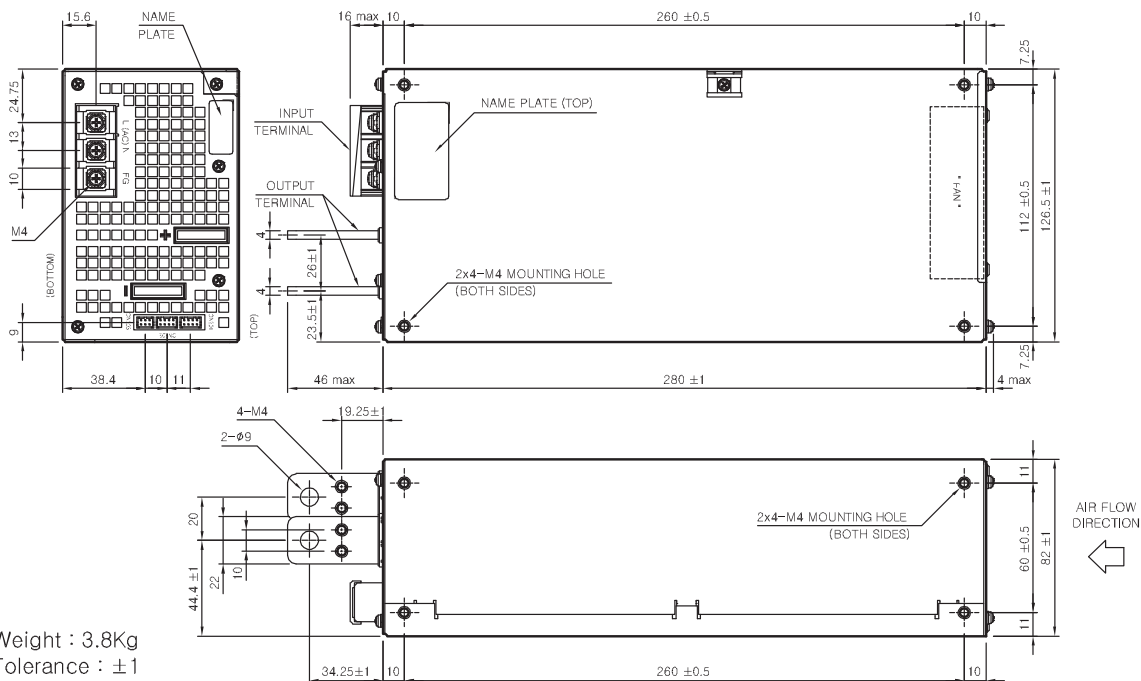
## Derating Curve

## 1500W AC/DC



## Mechanical Drawings

## 1500W AC/DC



- \* Weight : 3.8Kg
- \* Tolerance : ± 1
- \* Dimensions in mm





**Remote ON/OFF**

**1500W AC/DC**

Figures 3-1 through 3-3 show various configurations to set up remote ON/OFF for AOP1500

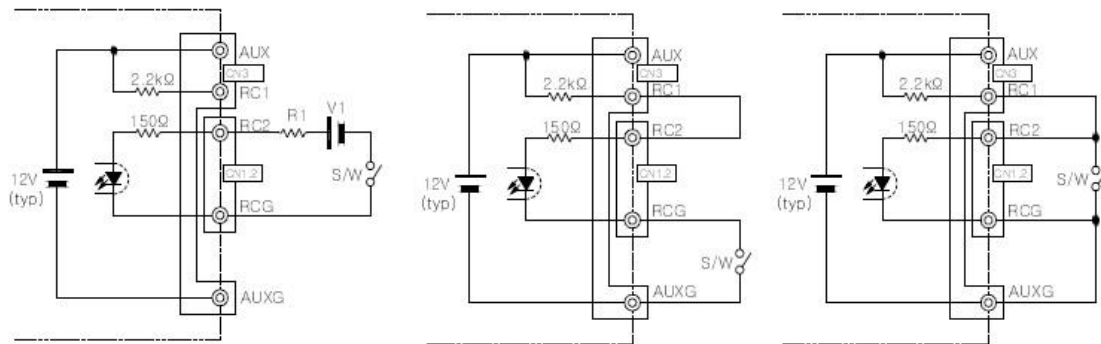
Fig 3-1 External Power Source

Fig 3-2 Internal power

Fig 3-3 Internal power

SW closed=on

SW closed=off



\*Other than Switch, a Relay, Transistor, TTL, and others can be used (Close L : 0-0.8V, Open H : 2.4-24V)

Figure 3-1: Tie RC2 of CN1 (purple) or CN2 (blue) to R1 in series with V1 to one end of the switch. Tie RCG of CN1 (green) or CN2 (orange) to the other end of the SW.

Figure 3-2: Tie RC1 of CN3 (Black) to RC2 of CN1 (purple) or CN2 (blue). Tie RCG of CN3 (yellow) to one end of the SW and tie AUXG of CN3 (red) to the other end of SW.

Figure 3-3: Tie RC1 of CN3 (Black) to RC2 of CN1 (purple) or CN2 (blue). Attach one end of SW to it. Tie RCG of CN3 (yellow) and AUXG of CN3 (red). Attach other end of SW to it.

Switch Logic	Fig. 3-1	Fig. 3-2	Fig. 3-3	Output condition	Fan Motor
Switch Open	Switch Open	Switch Open	Switch Close	ON	Rotate
Switch Close	Switch Close	Switch Close	Switch Open	OFF	Stop

Figure 3-1's resistor recommendation

V1	5V	12V	24V
R1(0.5W)	620Ω	1.5kΩ	4.7kΩ

