

# DC-AC INVERTER UNIT

PS-DA0288-01-x (S) (8 W DUAL OUTPUTS)

(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This low profile DC to AC Inverter is developed for dual lamps. Many different output connector possibilities will make this Backlight Inverter so flexible.



**APPLICABLE LCD:**

- 5.7 to 12 inches double lamp type
- Lamp Voltage 600 Vrms
- Lamp Current 2 x 5 mArms
- Lamp Start Up Voltage 1.500 Vrms (Vin : 12 Vdc)

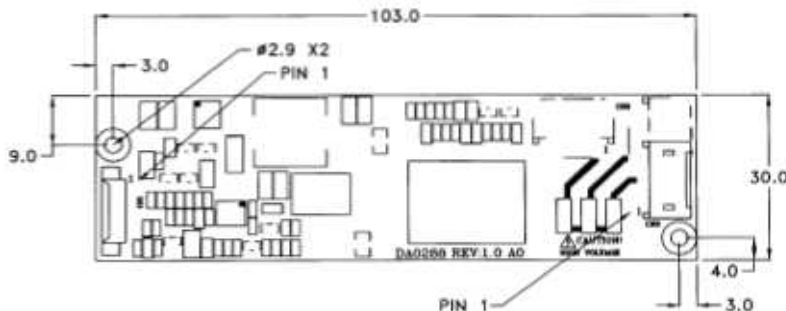
**FEATURES :**

- Remote ON/OFF
- Dimming with analogue voltage or by resistor dimming
- RoHS compliant (S)
- Alarm-signal-function
- Different models (see order key)

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range -10°C ~ +60°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :** L x W x H 103 x 30 x 9 mm



Unit : mm  
Weight :20 (g) typ.

Note: Please use plastic screw in case of a non-insulating mounting base!

**Components**

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (CEM-3)	t=1.0mm
2	Connector CN1	1	53261-0890	MOLEX
3	Connector CN3	1	SM03(4.0)B-BHS-1-TB	JST or equal

**Input side CN1:**

Pin No.	Symbols	Ratings
CN 1-1	Vin	10.8 ~ 13.2V
CN 1-2		
CN 1-3	GND	0 V
CN 1-4		
CN 1-5	Vrmt	0~0.4V=OFF / 2.5V~Vin=ON
CN 1-6	Vbr/Rbr	0~2.5V / 0~50kΩ
CN 1-7	Vbr/GND	0 ~ 50kΩ
CN 1-8	Vst	0V / 5V (Note 3)

**Output side CN3:**

Pin No.	Symbols	Ratings
CN 3-1	Vlow	0 Vdc
CN 3-2	Vhigh	600Vrms
CN 3-3	Vhigh	600Vrms

**Power Systems – The Power Solution**

Web: www.Power-Systems.de  
Email: Info@Power-Systems.de

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## ELECTRICAL CHARACTERISTICS :

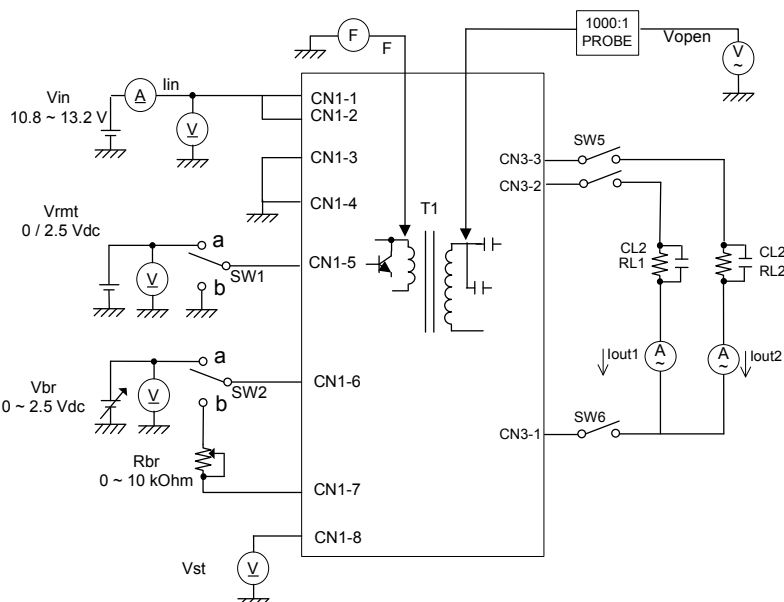
Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current (Brightness max.)	Iout1/2	12±0.05	5±0.25	-10~+60	4.5	5.0	5.5	mArms	
Output Current (Brightness min.)	Iout1/2	12±0.5	2.5	-10~+60	1.9	2.25	2.6	mArms	Vbr = 2.5 Vdc
Input Current	Iin	12±0.5	5±0.25	-10~+60	-	0.73	1.0	A	Vin 12V
Frequency	F	12±0.5	5±0.25	-10~+60	37.5	45.0	52.5	kHz	
Open Circuit Voltage	Vopen	11.4 min.	5±0.25	-10~+60	1.300	1.500	1700	Vrms	
Shutdown		12±0.5	5±	-10~+60	-	1	-	Sec.	

- Note 1 : Please keep minimum of 2mm clearance (all directions) between inverter high voltage area as marked on mechanical drawing and any conductors.
- Note 2 : Before apply any control signal into inverter, please provide Vcc first. Please follow the reversed sequence during power off. Power off control signal first, then power off Vcc.
- Note 3 : This is an output pin and it is active high (+5V) if any Lamp opens / fails.

## TEST CIRCUIT :

SW1	Operation of unit
a	Operation
b	Non operation

PS-DA0288-03-3



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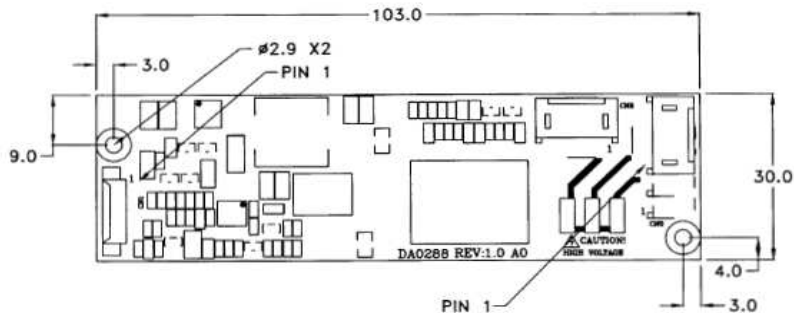
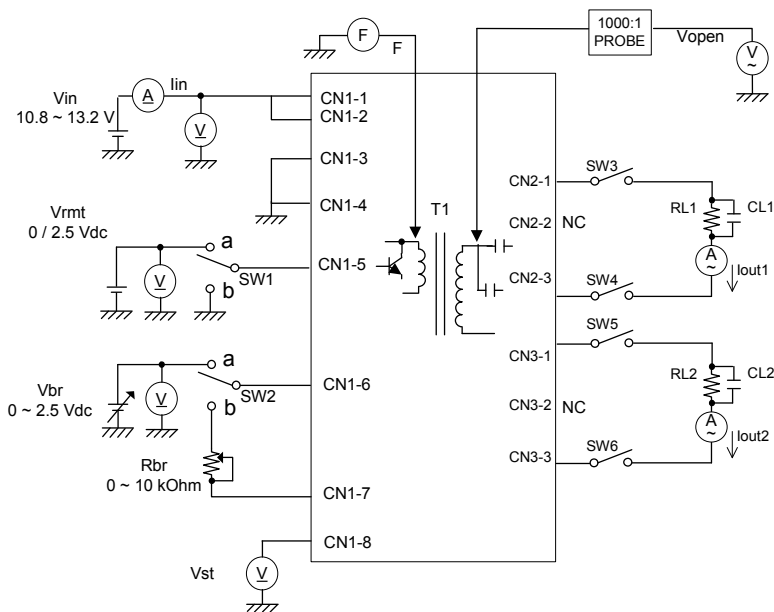
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**CONNECTOR/PINNING/ORDER KEY :**

Model	Connector	Pinning	Vin	Connector	Pinning	
					CN2	CN3
DA0288-01-1	2x SM02(8.0)	1=H, 2=N.C, 3=L	12V	CN2+CN3	1;3	1;3
DA0288-01-2	2x SM02 B-BHSS	1=H, 2=L	12V	CN2+CN3	1;2	3;4
DA0288-01-3	1x SM03(4.0)	1=L, 2+3=H	12V	CN3		1;2;3
DA0288-01-4	1x SM03(4.0)	1+2=H, 3=L	12V	CN3		2;3;4
DA0288-01-5	1x SM04(4.0)	1+2=H, 3=N.C, 4=L	12V	CN3		1;2;3;4

**TEST CIRCUIT :**

PS-DA0288-01-1



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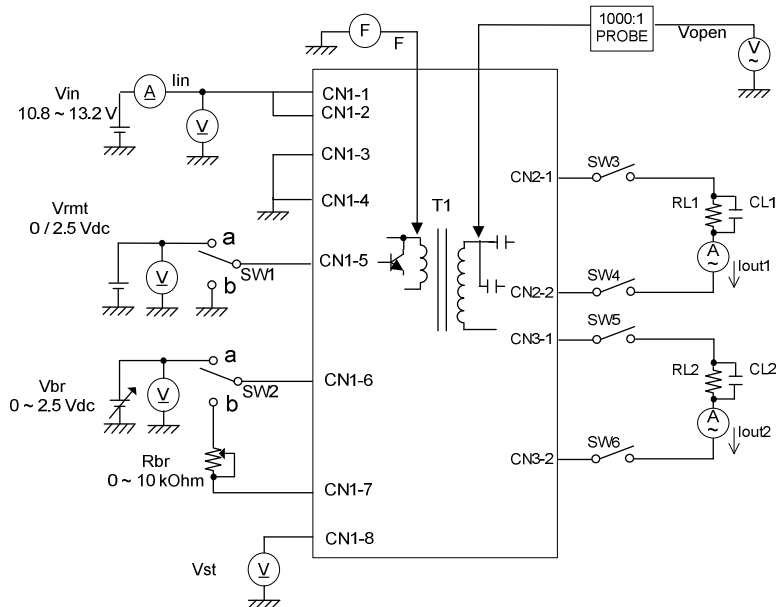
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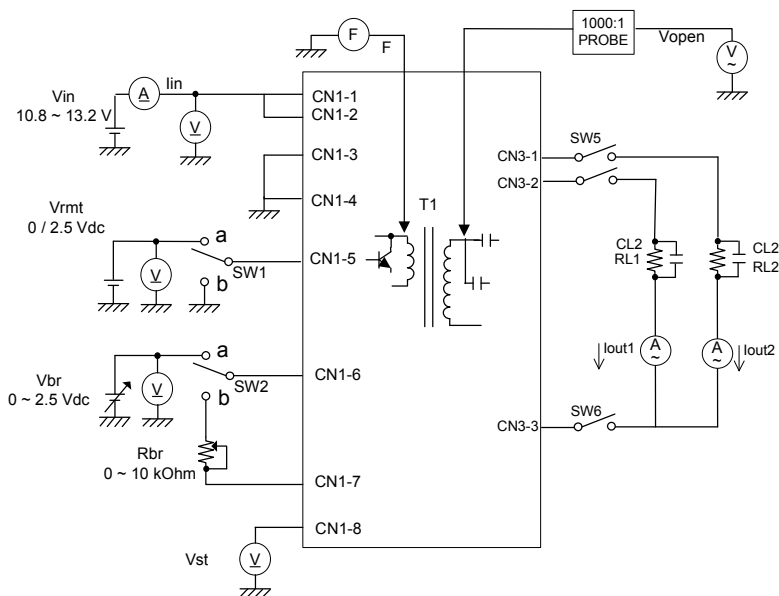
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## PS-DA0288-01-2



## PS-DA0288-01-4



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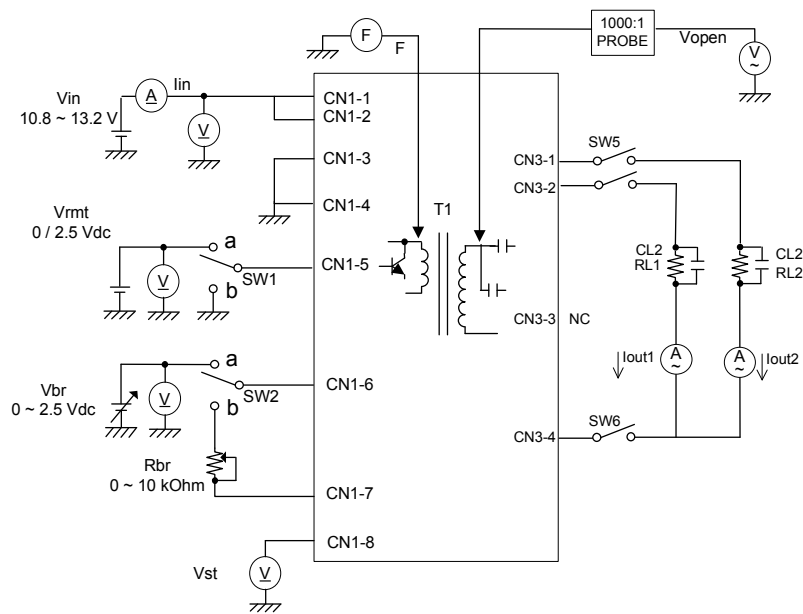
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PS-DA0288-01-5



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