

# DC-AC INVERTER UNIT

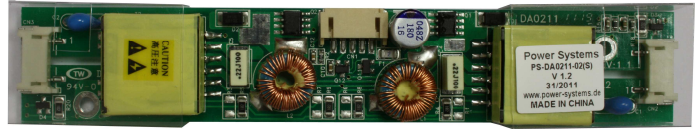
## PS-DA0211-02(S) (11 W DUAL OUTPUTS)

### DESCRIPTION :

This low profile DC/AC Inverter is developed for dual lamps.

### APPLICABLE LCD:

6.4 to 15 inches double lamps  
 Lamp Voltage 650 Vrms  
 Lamp Current 2 x 6.5 mArms  
 Lamp Start Up Voltage 1.500 Vrms (Vin : 12 Vdc)



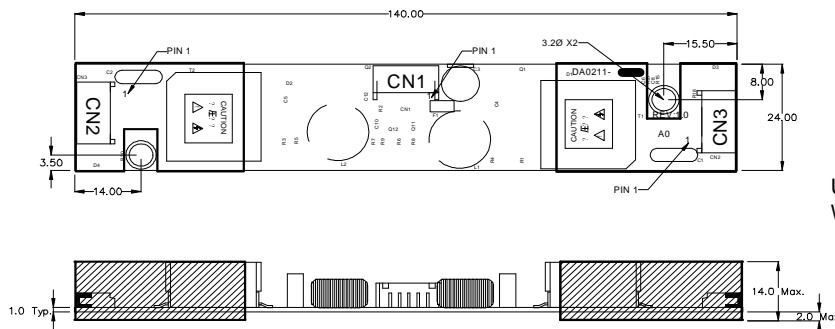
### FEATURES :

Remote ON/OFF  
 Open Lamp Detection  
 RoHS compliant (S)

### TEMPERATURE & HUMIDITY :

Operating Temperature Range -20°C ~ +70°C (for Optrex T-51513D104JU-FW-A-AC)  
 0°C ~ +50°C for all other displays.  
 Storage Temperature Range -40°C ~ +85°C  
 Humidity 95 %RH max

### DIMENSIONS : L x W x H 140 x 24 x 14 mm



Unit : mm  
 Weight :39,8 (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 (FR-4 or CEM-3)	t=1mm
2	Connector CN1	1	S5B-PH-SM3	JST or equal
3	Connector CN2 + CN3	2	SM02(8.0)B-BHS-1-TB	JST or equal

### Input side CN1:

Pin No.	Symbols	Ratings
CN 1-1	Vin	10.8 ~ 13.2 Vdc
CN 1-2	GND	
CN 1-3	Vbr	0 ~ 4.2 Vdc
CN 1-4	GND	
CN 1-5	Vrmt	0 ~ 0.4 = OFF / 4.5 ~ Vin = ON

### Output side CN2:

Pin No.	Symbols	Ratings
CN 2-1	Vhigh	650 Vrms (6.5 mArms)
CN 2-2	Vlow	(GND)

### Output side CN3:

Pin No.	Symbols	Ratings
CN 3-1	Vhigh	650 Vrms (6.5 mArms)
CN 3-2	Vlow	(GND)

## Power Systems – The Power Solution

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 Email: [Info@Power-Systems.de](mailto:Info@Power-Systems.de)

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## PS-DA0211-02(S) (11 W DUAL OUTPUTS)

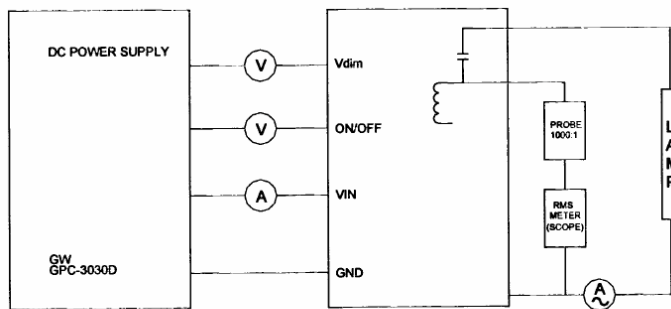
### ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	12±1.2	5±0.25	0 ~ +50	6.0	6.5	7.0	mArms	Vbr = 0 Vdc
Output Current	Iout	12±0.6	5±0.25	0 ~ +50	2.5	3.0	3.5	mArms	Vbr = 4.2 Vdc
Input Current	Iin	12±1.2	5±0.25	0 ~ +50	-	0.84	1.23	Adc	
Frequency	F	12±1.2	5±0.25	0 ~ +50	44.5	52	59.5	kHz	
Open Circuit Voltage	Vopen	11.4	5±0.25	0 ~ +50	1.300	1.500	1.700	Vrms	
No load Shutdown	Tsd	12±1.2	5±0.25	0 ~ +50	1.0	-	-	sec	without load
Dimming Function	Int. PWM	-	5±0.25	0 ~ +50	2.5	3.0	3.5	mArms	Vbr.4.2Vdc²

Note 1 : Please keep a minimum of 2mm clearance in all directions between inverter high voltage areas and any conductors as marked on mechanical drawing.

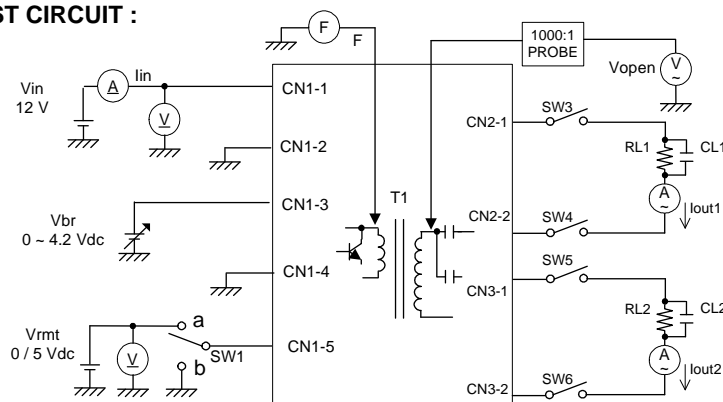
Note 2 : Dimming function: Brightness max. @ Vbr = 0 Vdc, Brightness min. @ Vbr. = 4,2 Vdc.

### TESTING BLOCK DIAGRAM :



EQUIPMENT:  
 1. PROBE : TEKTRONIX P6051A  
 2. VRMS SCOPE : TEKTRONIX TDS3032  
 3. AC CURRENT METER: FLUKE 45  
 4. DC POWER SUPPLY : GW GPC3036D

### TEST CIRCUIT :



SW 1	Operation of unit
a	Operation
b	Non operation

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