



**APPLIED
CONCEPTS INC.**

397 Route 281 - P.O. BOX 1175
Tully, New York 13159-1175
Phone: (315) 696-6676 Fax: (315) 696-9923
www.acipower.com

AC2-V1-1532

PRODUCT DATA SHEET - PAGE 1 OF 2

CCFL INVERTER

(For Multiple Tube Applications)

03/24/05

GENERAL DESCRIPTION

The AC2-V1-1532 is designed to power 6 CCFL's to a nominal power level of 16 watts.

Enable control is accomplished @ pin 5 of CON1.

Analog intensity control is accomplished by the user providing a DC level @ pin 6 of CON1.

A +5V reference voltage is available @ pin 7 of CON1 for external use.

PWM is available @ pin 8 of CON1 for external use.

All outputs are open short circuit protected

MECHANICAL / ENVIRONMENTAL

Weight = 30 grams

Altitude = 10,000 Ft maximum

Humidity < 85% non-condensing

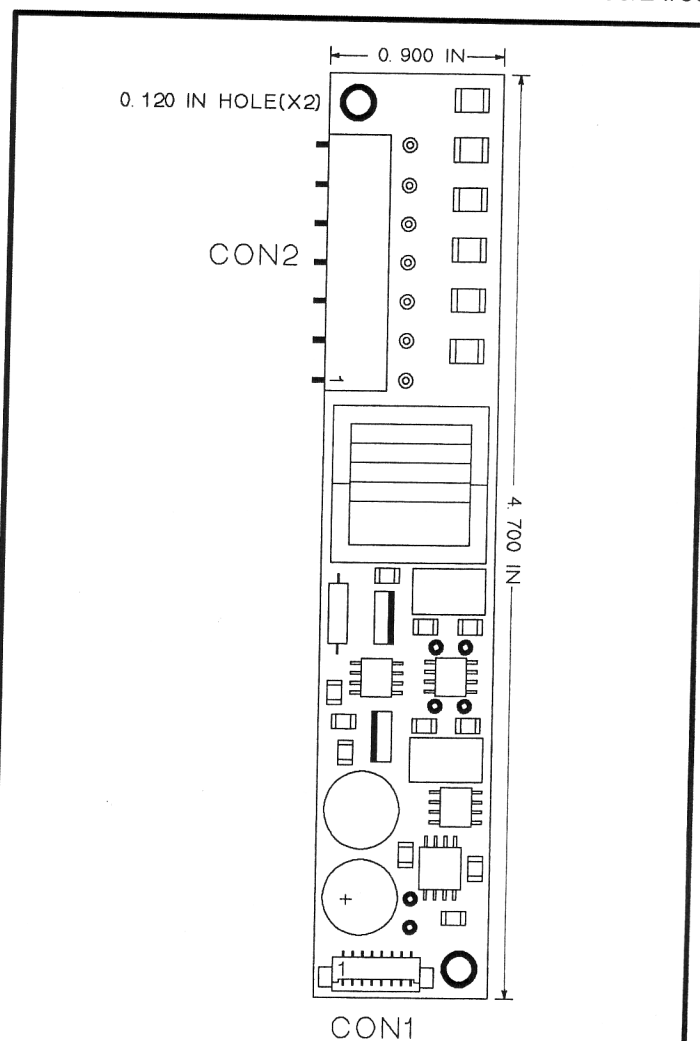
Size (L x W x H) = 4.7 IN x 0.9 IN x 0.575 IN

PCB thickness = 0.062 IN

Two mounting holes = 0.120 IN diameter

Input Power & Control Connector = CON1

CCFL Output Connector = CON2



PROFILE < 0.575 IN

INPUT CONNECTOR
CON1
MOLEX 53261-0890

OUTPUT CONNECTOR
CON2
MOLEX 22-28-1130

PIN #	FUNCTION
1	+12V(PWR)
2	+12V(PWR)
3	GND(PWR)
4	GND(PWR)
5	ENABLE
6	VCNTL
7	+5V REF
8	PWM OUT

PIN #	FUNCTION
1	CCFL COMMON
2	NC
3	CCFL6
4	NC
5	CCFL5
6	NC
7	CCFL4
8	NC
9	CCFL3
10	NC
11	CCFL2
12	NC
13	CCFL1



APPLIED CONCEPTS INC.

397 Route 281 - P.O. BOX 1175
Tully, New York 13159-1175
Phone: (315) 696-6676 Fax: (315) 696-9923
www.acipower.com

AC2-V1-1532

PRODUCT DATA SHEET - PAGE 2 OF 2

MAXIMUM RATINGS*

03/24/05

Symbol	Parameter	Value	Unit
Vin	Supply Voltage (Referenced to Ground)	-0.7 to 14	Vdc
Vip	Voltage applied to any Input Pin (Referenced to Ground)	-0.7 to 5.7	Vdc
Iop	Current sourced or sinked from any Output Pin	+/- 10	mAdc
Pin	Input Power (DC Input Voltage x DC Input Current)	21	W
Top	Operating Temperature (Still air ambient around Inverter)	0 to +70	DegC
Tstg	Storage Temperature	-20 to +105	DegC

* Maximum Ratings are those values beyond which damage to the inverter may occur

RECOMMENDED OPERATING CONDITIONS

Symbol	Parameter	Min	Max	Unit
Vin	Supply Voltage (Referenced to Ground)	10.8	13.2	Vdc
Lsv	Cold Cathode Fluorescent Lamp Sustaining Voltage	325	535	Vrms
Vcntl	Intensity Control Voltage	0	5.0	Vdc

ELECTRICAL CHARACTERISTICS

Vin = +12V, Lsv = 430Vrms, Vcntl = +5V, Enable = +5V unless otherwise specified

Symbol	Parameter	Test Conditions	Min	Max	Unit
Lstart	Lamp Starting Voltage		1700		Vrms
Lout	Lamp Output Current		5.4	6.6	mArms
Lfreq	Lamp-Current Frequency		48	58	Khz
Pfreq	PWM Dimming Frequency	Vcntl (Pin 6) = +2.5V	95	101	Hz
Pdc	PWM Duty Cycle Range	Vcntl (Pin 6) = 0 to 5V	0	100	%
ENoff	Enable Control, unit OFF	Enable (Pin 5)		0.8	Vdc
ENon	Enable Control, unit ON	Enable (Pin 5)	2.0		Vdc
+5Vout	+5V Reference Out	10k load to ground (Pin 7)	4.5	5.25	Vdc
PWMlo	PWM output signal low	10k load to ground (Pin 8)		0.5	Vdc
PWMhi	PWM output signal high	10k load to ground (Pin 8)	4.5		Vdc
Iin	Input Current Draw			1.6	Adc
Eff	Electrical Efficiency		90		%