



**HIGHNESS**<sup>TM</sup>

**IXL-300-01**

**LED BACKLIGHT INVERTER**

**FUNCTIONAL DRAFT SPECIFICATION**

(This document is meant for customers' approval)

**Release Date**  
3<sup>rd</sup> Jun 2021

---

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION WHICH IS SOLELY OWENED BY 'HIGHNESS MICROELECTRONICS PVT. LTD.' ANY UNAUTHORISED COPY OR PRINTING OR PUBLISHING OF INFORMATION IN THIS DOCUMENT IN PART OR IN COMPLETE IS RESTRICTED.

---

**HIGHNESS MICROELECTRONICS PVT. LTD**

URL: [www.highnessmicro.com](http://www.highnessmicro.com), Email: [sales@highnessmicro.com](mailto:sales@highnessmicro.com)

## 1. Application

This inverter is designed for the backlight of the LCD panel with LED (Light Emitted Diode Lamp), and it's used in the LCD TV Set or Monitor.

1.1 Applicable load: From 5.7" inch to 10.4 inch LCD Panel

1.2 Notice:

1.2.1 For safety issue, Please keep 4.0mm at least from the metal parts of the system to the inverter or Put a High-voltage insulator between the inverter and the metal parts to avoid the situation of high Failure or Arcing (ETC)

1.2.2 Don't twist, deform, drop or knock the inverter during assembly.

1.2.3 The inverter is usually designed without the case. Please take care about ESD at anytime.

1.2.4 Due to the characteristic of panels, the brightness is sensitive about temperature; you must Measure it in the same condition and be waiting for 5 to 10 minutes after the power on.

## 2. Environment characteristics

### 2.1 Temperature

Storage: 0°C ~ 60°C .

Operating: -20°C ~ 70°C.

### 2.2 Humidity

Storage: Ha=95%RH, non-condensing

Operating: Ha=95%RH, non-condensing

## 3. Features

3.1 Open lamp or short circuit protection

3.2 Soft start or soft on/off control

3.3 Constant operating frequency.

## 4. Operating characteristics

Parameter	Symbol	MIN	TYP	MAX	Unit	Remark
Input Voltage	Vin	+2.6	+5.0	5.5	V	
Input Current	Iin	570	600	650	mA	
Output Current	Iout	200	230	260	mA	
Working Frequency	ENA	0.75	1.0	1.25	MHz	

## 5. PIN Assignments

### 5.1 DC Input (CN9)

Pin No.	Symbol	Description
1	VIN	DC +5V
2	GND	Ground
3	Brightness	Brightness control 0V ~ 5V
4	GND	GND
5	Control	ON/OFF control 5V (ON) 0V (OFF)

### 5.2 AC Output (CN13)

Pin No.	Symbol	Description
1	LED – OUT -	LED Low Voltage
2	LED – OUT -	LED Low Voltage
3	LED – OUT -	LED Low Voltage
4	LED – OUT +	LED High Voltage
5	LED – OUT +	LED High Voltage
6	LED – OUT +	LED High Voltage

## 6. Mechanical Characteristics

Dimension: 39 (L) x 16 (W)

