

IDD-241100/481100

100 W DC-to-DC Converter Module

Version: 1.00

Quick Installation Guide



ABOUT THE IDD-241100/481100

The highly efficient, high-performance 100-watt IDD-241100/481100 DC-to-DC converter module provides a single 12 V output for various applications. The IDD-241100 receives 24 V inputs while the IDD-481100 receives 48 V inputs. The IDD-241100/481100 is built on an intelligent design and provides outstanding line and load regulations. The IDD-241100/481100 is capable of sustaining 90% power efficiency.

SPECIFICATIONS

- Highly compact design
- Smart system on/off control
- High efficiency up to 90%
- Reverse protection
- Over voltage protection
- Over current protection
- Short circuit protection
- RoHS compliant

- Electrical Specifications:
 - o Total output capacity: 100 W
 - 12 V @ 8.33 A Max.
 - o Input Voltage:
 - IDD-241100: 24 V DC
 - IDD-481100: 48 V DC
- Dynamic Load
 - o Transient toggle rate: 1 KHz
 - o Transient current step: From 0% to 40% and 60% to 100% of max current.
- Noise and ripple: <240 mV
Vp-p ripple and noise for all output is less than 2%, Measuring is 20MHz bandwidth limited oscilloscope and terminated each output with a 0.1uF capacitor and 10uF electrolytic capacitor
- Load regulation: <240 mV
- Dimensions: 40 mm x 100 mm
- Environment:
 - o Operating temperature: -20°C ~ +70°C
 - o Storage temperature: -40°C ~ +125°C
- Weight: NW: 60 g

PACKING LIST

When you unpack the power module, make sure the following items have been shipped.

- 1 x IDD-241100/481100 DC/DC converter module
- 1 x QIG (Quick Installation Guide)
- 1 x Power switch cable (30 cm)
- 1 x DC input cable for terminal block (20 cm)

IDD-241100/481100 DIMENSION DRAWING

The dimensions of the IDD-241100/481100 are shown below.

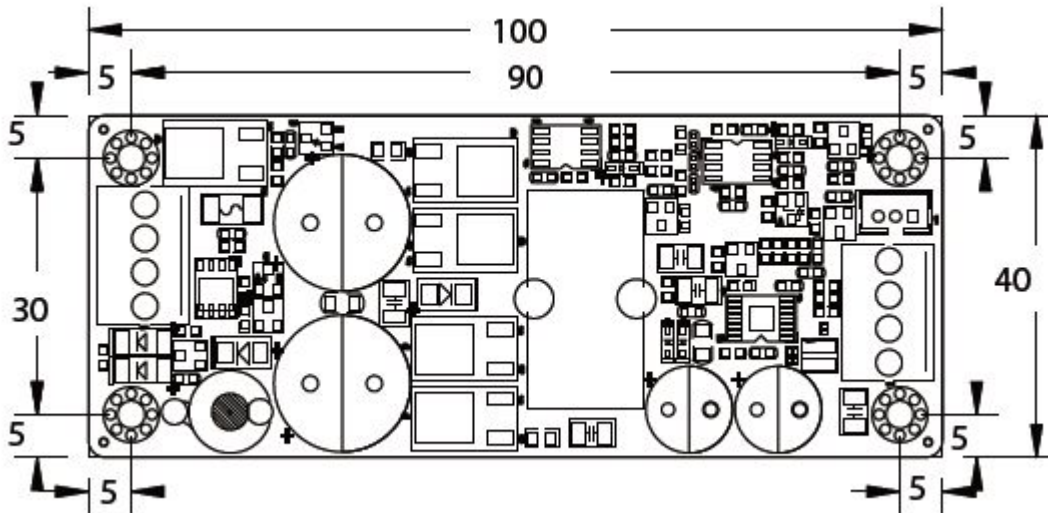


Figure 1: IDD-241100/481100 Dimension Drawing (measurement units: millimeter)

IDD-241100/481100 CONNECTOR AND JUMPER LOCATIONS

The following diagram shows the connector and jumper locations of the IDD-241100/481100.

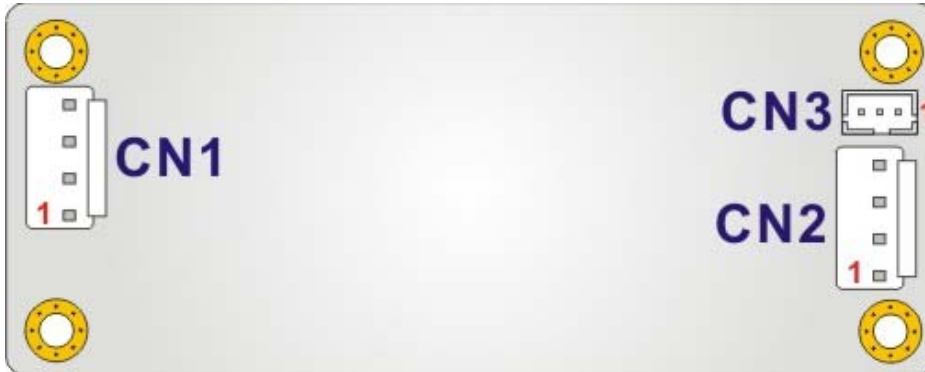


Figure 2: IDD-241100/481100 Connector and Jumper Locations

INPUT POWER CONNECTORS (CN1)

PIN NO.	DESCRIPTION
1	VIN
2	VIN
3	GND
4	GND

Table 1: Input Power Connector Pinouts

OUTPUT POWER CONNECTOR (CN2)

PIN NO.	DESCRIPTION
1	+12 V
2	+12 V
3	GND
4	GND

Table 2: Output Power Connector Pinouts

POWER ON/OFF SWITCH AND LED CONNECTOR (CN3)

PIN NO.	DESCRIPTION
1	SHDN# (To shut down output power function, short pin-1 and pin-2)
2	GND
3	LEDA [External LED ($V_f < 3V$) function, pin-3 to anode and pin-2 to cathode]

Table 3: External Power On/Off Switch and LED Connector Pinouts