

IRT40C

Isolated 10~60V to 12V 40W DC/DC Converter Module



KEY FEATURES

- High efficiency DC-DC Converter
- Low inrush current
- Output over-current protection
- Wide range voltage input
- Optional Ignition Control Function



SPECIFICATIONS

System Specification

Input Voltage	10V to 60V DC	Load Range	12V 3.3A
Power Consumption	40W	Isolation	Yes
Ripple And Noise	Less than 120mV	Line Regulation	Less than $\pm 1\%$ at rated 10~60V input voltage
Load Regulation	Less than $\pm 5\%$	Efficiency	Up to 90% (Full loading)
Protection	OCP protection OVP protection		

Certification

Certification CE, FCC

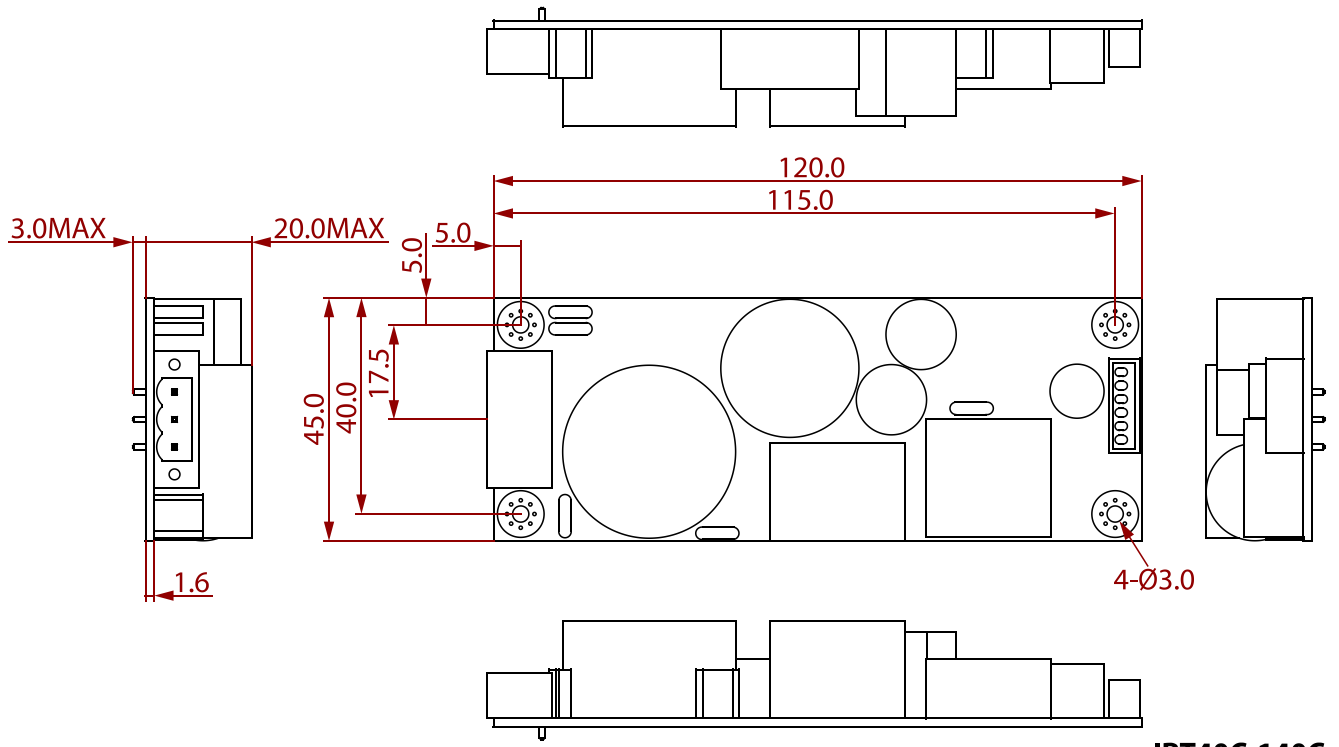
Environment

Operating Humidity	10% to 90% RH, Non-Condensing	Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C	Altitude	0 to 10000ft

Mechanical

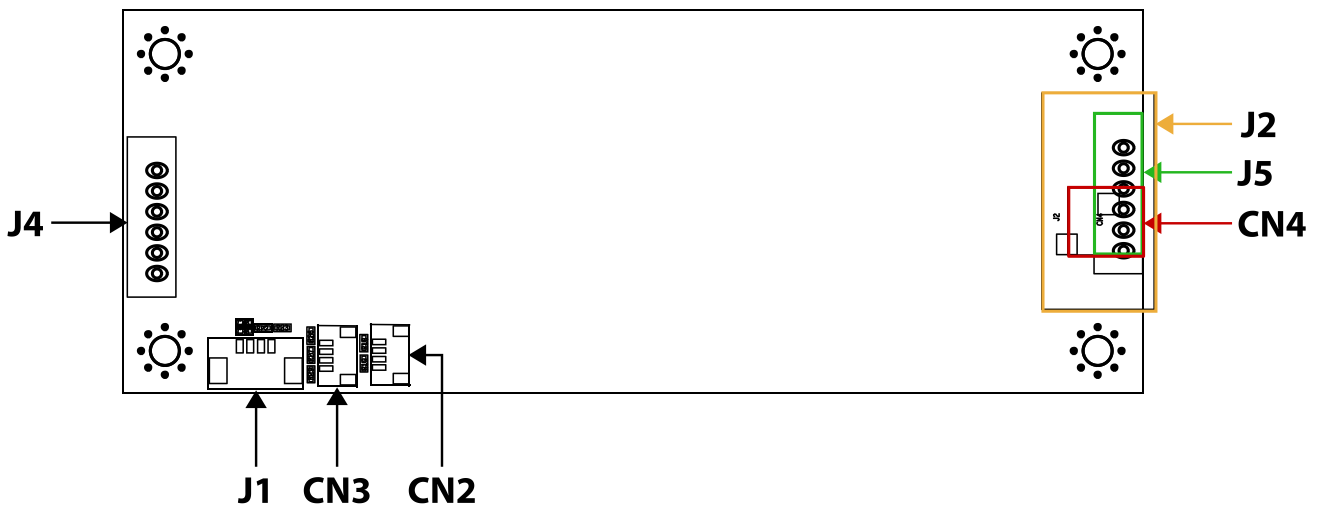
Dimension 120 x 45 x 24.6 mm

DIMENSIONS UNIT:MM



IRT40C-140C

Pin Assignment:



J1: Debug port

1x4p/P1.25/WHITE-SMD-180

Pin	Symbol
1	+V5A
2	GND
3	C2CK
4	C2D

CN2:

1x4p/P1.0/WHITE-SMD-180

Pin	Symbol
1	+V5A
2	TX
3	RX
4	GND

J2: Input Connector

2EHDRM-03P/DIP

Pin	Symbol
1	VIN+
2	VIN-
3	GND
4	N/A
5	N/A

CN3:

1x4p/P1.0/WHITE-SMD-180

Pin	Symbol
1	BT IN
2	BT OUT
3	PWR
4	GND

J4: DC 12V output

1x6p/P2.5/WHITE-DIP-180

Pin	Symbol
1	+12V
2	GND
3	GND
4	GND
5	+12V
6	+12V

CN4:

1x2p/P3.96/WHITE-DIP-180

Pin	Symbol
1	VIN-
2	VIN+

J5: Input Connector

P: 2.5mm

Pin	Symbol
1	IGN_GND
2	VIN-
3	VIN-
4	VIN-
5	VIN+
6	VIN+

NOTE

1. This is a simplified drawing and some components are not marked in detail.
2. Please contact our sales representative if you need further product information.
3. All specifications are subject to change without prior notice.
4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.