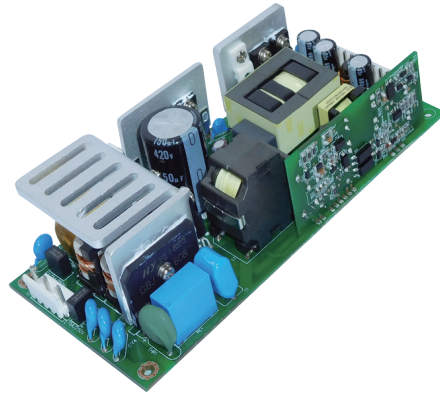
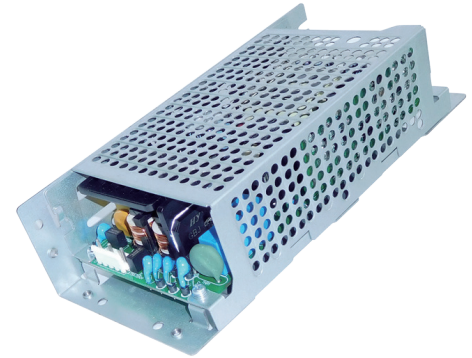


# UOHC 150W Series

## Industrial Power Supply



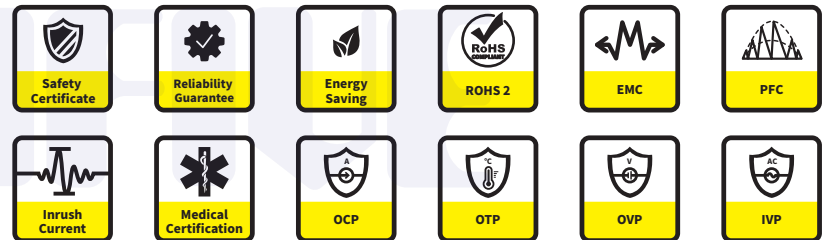
▲ UOHC3150 Series



▲ UOHC3150 Series with Chassis

CB CE UK CA C **UL** US FCC

■ Please contact our sales department for safety standard of each model.



## Model Name Definition

**U O H C 3 1 5 0 - - - - -**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① UNIFIVE Product
- ② Serial Name
- ③ Serial Name
- ④ Serial Name
- ⑤ Serial Name
- ⑥ Output Power Rating
- ⑦ Output Voltage
- ⑧ Output Current
- ⑨ Optional Items
  - N Typical Type
  - R Remote Control and Increase Output (5V, 1A)
  - S Increase Output (5V, 1A)
  - CN Typical Type with Chassis
  - CR Remote Control and Increase Output (5V, 1A) with Chassis
  - CS Increase Output (5V, 1A) with Chassis

**5 years warranty**

Caution! Do not twist or bend the printed circuit board since SMD components were soldered on it.

Be sure to do the necessary test for the equipment of end user which supplied power by this switching power supply and following the specifications of EMC/EMI.

## Product Highlights

- Stability
  - Conditional Peak Output Up to 300W
  - Meet Complies with IEC61000-3-2
  - Energy Efficiency
  - Power Factor Correction
  - Full Range Input Voltage (85Vac~264Vac)
  - Inrush Current Limit
  - Operating Altitude Up to 5,000m
  - Add Internal Standby Power (5V) Supplied Power for Remote Control
  - JST Connector\* or the same level substitute as JST Connector
- \*Please contact sales if demanding JST connector.
- Appendix 8 of PSE : Comply with Dusty Requirement.

## Protection

- Short Circuit Protection
- Over Voltage Protection
- Over Current Protection
- Over Temperature Protection
- Brown In and Brown Out Protection

## Safety Standard

- 60065-1
- 60335-1
- 60601-1
- 60950-1
- 61558-1
- 62368-1
- PSE 別表第八 100V 基準に準拠

## Efficiency

- up to 89%

## Emissions

- FCC Part18 Class B
- CE CISPR 11 EN55011
- VCCI Class B
- CE CISPR 14 EN55014-1
- FCC Part15 Class B
- CE CISPR 32 EN55032
- BS EN 55032
- BS EN55011
- BS EN55014-1

\*Power supply mounted in user's metal chassis.

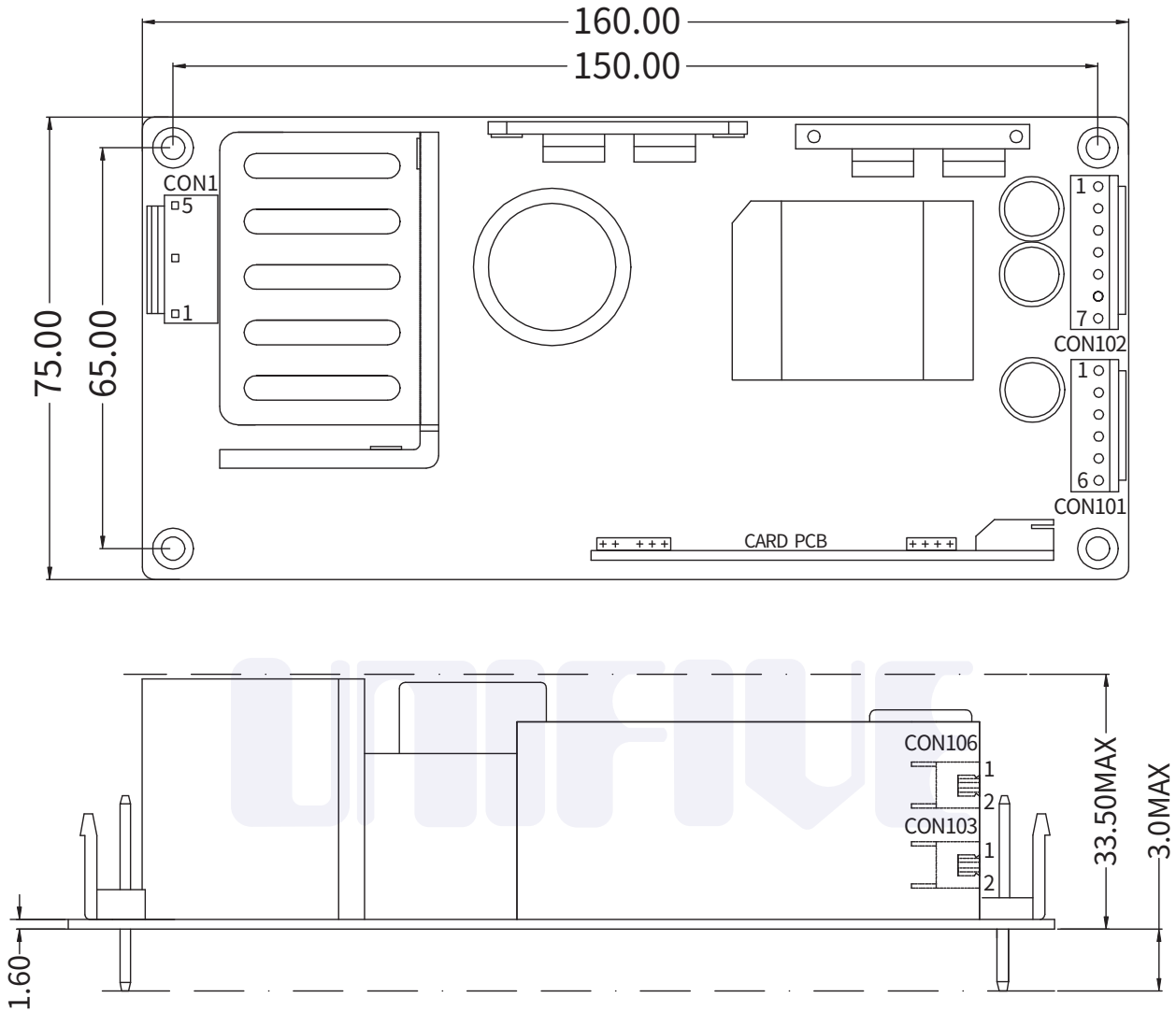
## Immunity

- EN 55035
- BS EN 55035
- EN60601-1-2
- BS EN60601-1-2
- EN55014-2
- BS EN55014-2

more detail on next page

UOHC 150W Series							
Model		UOHC3150-1213	UOHC3150-2406	UOHC3150-3604	UOHC3150-4803	5V	
Output		Output 1				Output 2 (Option)	
Output Wattage Max. (W)		150W (300W(*1))				5W	
DC Output	Convection	12.0V / 12.5A	24.0V/6.3A (12.6A(*1))	36.0V / 4.16A (8.4A(*1))	48.0V / 3.13A (6.4A(*1))	5.0V / 1.0A	
DC Output	Forced Air (*2)	12.0V / 15.6A	24.0V/7.8A (12.6A(*1))	36.0V / 5.2A (8.4A(*1))	48.0V / 3.9A (6.4A(*1))	5.0V / 1.0A	
Specifications							
Input	Voltage (V)		85Vac~264Vac				
	Current (A)	ACIN 100V	2.0A Typical (Io=100%)				
		ACIN 200V	1.0A Typical (Io=100%)				
	Frequency (Hz)		50Hz/60Hz (47Hz-63Hz)				
	Efficiency (%)	ACIN 100V	86.0% Typical				
		ACIN 200V	88.0% Typical				
	Power Factor (%)	ACIN 100V	0.99 Typical				
		ACIN 200V	0.95 Typical				
Inrush Current (A)	ACIN 100V	15.0A/30.0A Typ.(Full Load, Cold Start, Ta=25°C)/Restart After More than 3sec.					
	ACIN 200V	30.0A/30.0A Typ.(Full Load, cold Start, Ta=25°C)/Restart After More than 3sec.					
Leakage Current (mA)		0.4/0.75 Max. (ACIN 100V/200V 60Hz, Io=100%, According to IEC60950-1, IEC62368-1 and DEN-AN)					
Output	Voltage (V)		12.0V	24.0V	36.0V	48.0V	5.0V
	Current (A)		12.5A	6.3A	4.16A	3.13A	1.0A
	Line Regulation (mV)		96mV,Max.	96mV,Max.	144mV,Max.	192mV,Max.	40mV,Max.
	Load Regulation (mV)		150mV,Max.	150mV,Max.	240mV,Max.	240mV,pk-pk	40mV,Max.
	Ripple (mVp-p) (0°C to +50°C) (*3)		120mV,pk-pk	120mV,pk-pk	150mV,pk-pk	150mV,pk-pk	50mV,pk-pk
	Ripple (mVp-p) (-10°C to 0°C) (*3)		160mV,pk-pk	160mV,pk-pk	200mV,pk-pk	200mV,pk-pk	90mV,pk-pk
	Noise (mVp-p) (0°C to +50°C) (*3)		150mV,pk-pk	150mV,pk-pk	250mV,pk-pk	250mV,pk-pk	100mV,pk-pk
	Noise (mVp-p) (-10°C to 0°C) (*3)		180mV,pk-pk	180mV,pk-pk	300mV,pk-pk	300mV,Max.	140mV,pk-pk
	Temperature Regulation (mV)	0 to +50°C	150mV,Max.	240mV,Max.	360mV,Max.	480mV,Max.	-
		-10 to +50°C	180mV,Max.	290mV,Max.	450mV,Max.	600mV,Max.	-
	Drift (mV)(*4)		48mV,Max.	96mV,Max.	144mV,Max.	192mV,Max.	-
	Start-Up Time (ms)		500 Typical (ACIN 100V, Full Load), at 25°C				
	Hold-Up Time (ms)		20 Typical (ACIN 100V, Full Load), at 25°C				
	Output Voltage Setting (V)		12.0V~12.48V	24.0V~24.96V	36.0V~37.44V	48.0V~49.92V	4.75V~5.25V
	Output Voltage Variable Range (V)		10.8V~13.2V	21.6V~27.5V	32.4V~39.6V	39.6V~52.8V	-
	Over Current Protection		Over 101% of Peak Current ; Latch Off	Over 101% of Peak Current ; Latch Off	Over 101% of Peak Current ; Latch Off	Over 101% of Peak Current ; Latch Off	1.5A Min. ; Auto-Recovery
Over Voltage Protection		13.8V~16.0V; Latch Off	27.6V~33.6V; Latch Off	41.4V~50.4V; Latch Off	55.2V~63.0V; Latch Off	9.5V Max; Latch Off	
Short Protection		Latch Off	Latch Off	Latch Off	Latch Off	Auto-Recovery	
Remote On /Off		Option					
Isolation	Input-Output.RC		AC4,000V 1Minute, Cutoff Current = 10mA (at Room Temperature)				
	Input-FG		AC2,000V 1Minute, Cutoff Current = 10mA (at Room Temperature)				
	Output.RC-FG		DC500V 1Minute, Cutoff Current = 25mA (at Room Temperature)				
Operating Temperature/Humidity/Altitude		-10°C~70°C / 20%RH~90%RH / 5000m max. (Derating is Required)					
Storage Temperature/Humidity		-20°C~75°C / 20%RH~90%RH					
Vibration		10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3 Minutes Period, 60 Minutes Each along X, Y and Z Axis					
Impact		JIS-C-0041 Half Sin Wave, 300m/s <sup>2</sup> , X, Y, Z, 6ms, 3 Times for Each Direction. (196.1m/s <sup>2</sup> (20G), 11ms, Once Each X, Y and Z Axis)					
Safety		UL 60950, EN 60950, UL 62368, EN 62368					
EMC		Meet VCCI Class B , FCC Class B , CISPR 32 Class B , EN55032					
Harmonic Attenuator		Meet IEC61000-3-2					
Size		no Chassis:160(L)X75(W)X36.5(H)mm with Chassis:188(L)X85(W)X47(H)mm					
Cooling Method		Convection / Forced Air					
<ul style="list-style-type: none"> <li>1. Power supply can be operated in condition of peak load 300W for 10 seconds and the duty is less than 0.5.</li> <li>2. Condition for forced air is no less than 15CFM.</li> <li>3. Parallel a 22uF Aluminum electrolytic capacitor and 0.1uF ceramics capacitor at the test point. The position of test point is 150mm from output terminal to system load. The bandwidth of oscilloscope is 20MHZ.</li> <li>4. Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25C, with the input voltage held constant at the rated input / output.</li> </ul>							

### UOHC3150 Series



Mounting Holes : 4-Ø3.50

TOLERANCE: ±0.5  
Unit: mm

**CON1**

PIN NUMBER	INPUT
1	AC(L)
2	
3	AC(N)
4	
5	FG
CON1 : INPUT CONNECT MODEL : 5P-VH-B (THE EQUIVALENT)	

**CON103**

PIN NUMBER	REMOTE
1	RC(+)
2	RC(-)
CON103: REMOTE CONNECT MODEL : B2B-XH-A (THE EQUIVALENT)	

**CON102**

PIN NUMBER	OUTPUT
1-7	-V
CON102: OUTPUT CONNECT MODEL : B7P-VH (THE EQUIVALENT)	

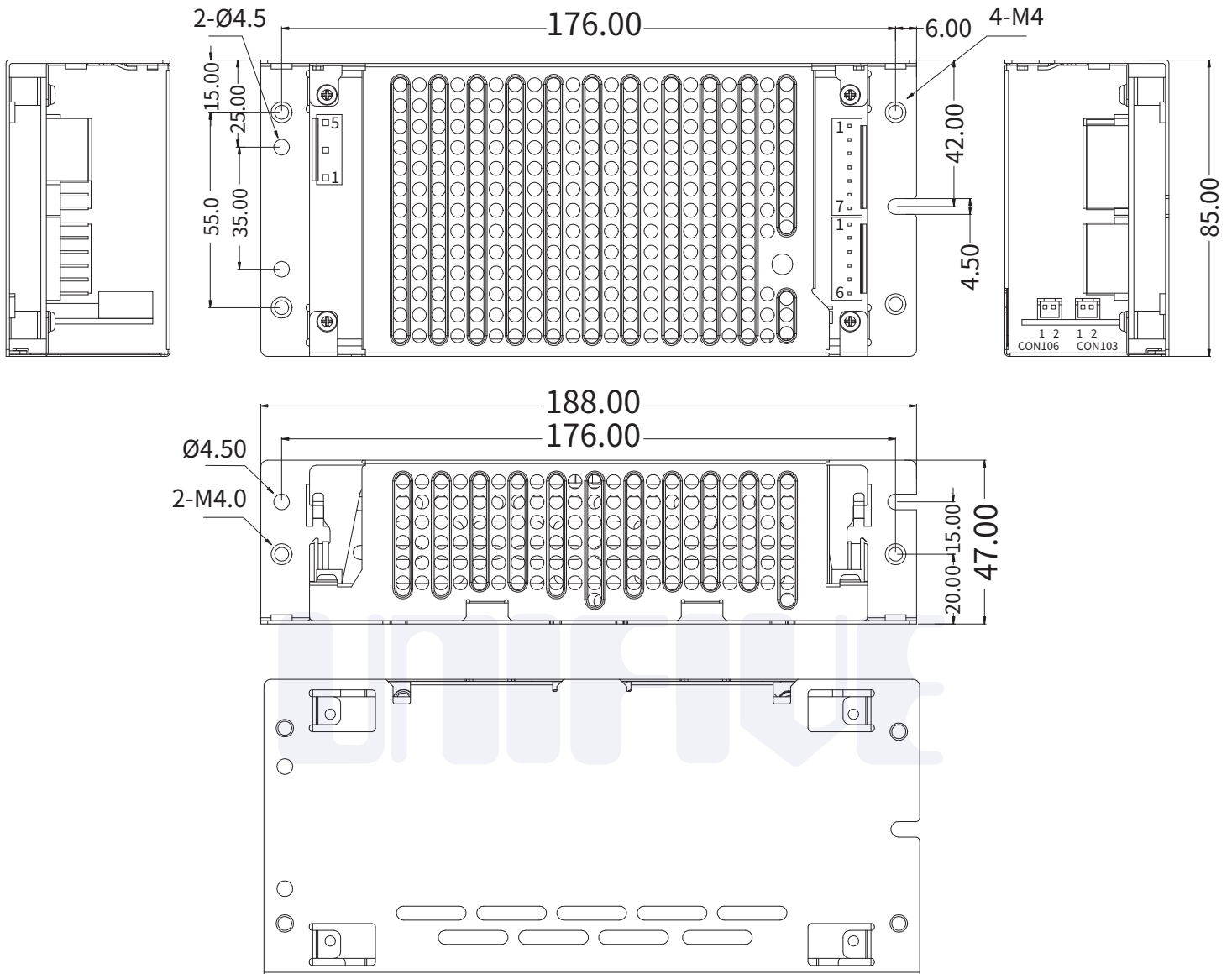
**CON101**

PIN NUMBER	OUTPUT
1-6	+V
CON101: OUTPUT CONNECT MODEL : B6P-VH (THE EQUIVALENT)	

**CON106**

PIN NUMBER	OUTPUT
1	5V(+)
2	5V(-)
CON106: OUTPUT CONNECT MODEL : B2B-XH-A (THE EQUIVALENT)	

**UOHC3150 Series with Chassis**



**TOLERANCE: ±0.5**  
**Unit:mm**

**CON1**

PIN NUMBER	INPUT
1	AC(L)
2	
3	AC(N)
4	
5	FG
<b>CON1 : INPUT CONNECT</b> <b>MODEL : 5P-VH-B</b> <b>(THE EQUIVALENT)</b>	

**CON103**

PIN NUMBER	REMOTE
1	RC(+)
2	RC(-)
<b>CON103: REMOTE CONNECT</b> <b>MODEL : B2B-XH-A</b> <b>(THE EQUIVALENT)</b>	

**CON102**

PIN NUMBER	OUTPUT
1-7	-V
<b>CON102:OUTPUT CONNECT</b> <b>MODEL : B7P-VH</b> <b>(THE EQUIVALENT)</b>	

**CON101**

PIN NUMBER	OUTPUT
1-6	+V
<b>CON101:OUTPUT CONNECT</b> <b>MODEL : B6P-VH</b> <b>(THE EQUIVALENT)</b>	

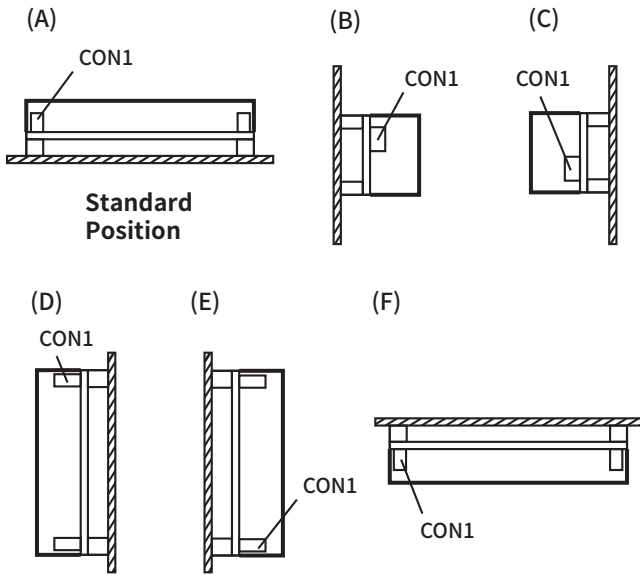
**CON106**

PIN NUMBER	OUTPUT
1	5V(+)
2	5V(-)
<b>CON106: OUTPUT CONNECT</b> <b>MODEL : B2B-XH-A</b> <b>(THE EQUIVALENT)</b>	

■ Please contact our sales department for details of each model ■

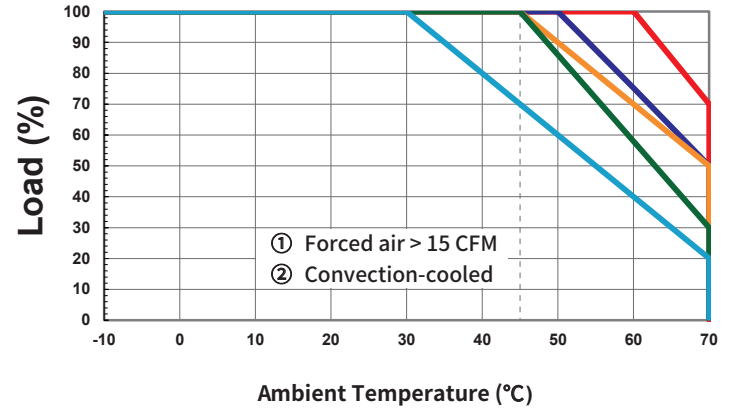
# Mounting methods and derating curve

Power Supply Positioning:



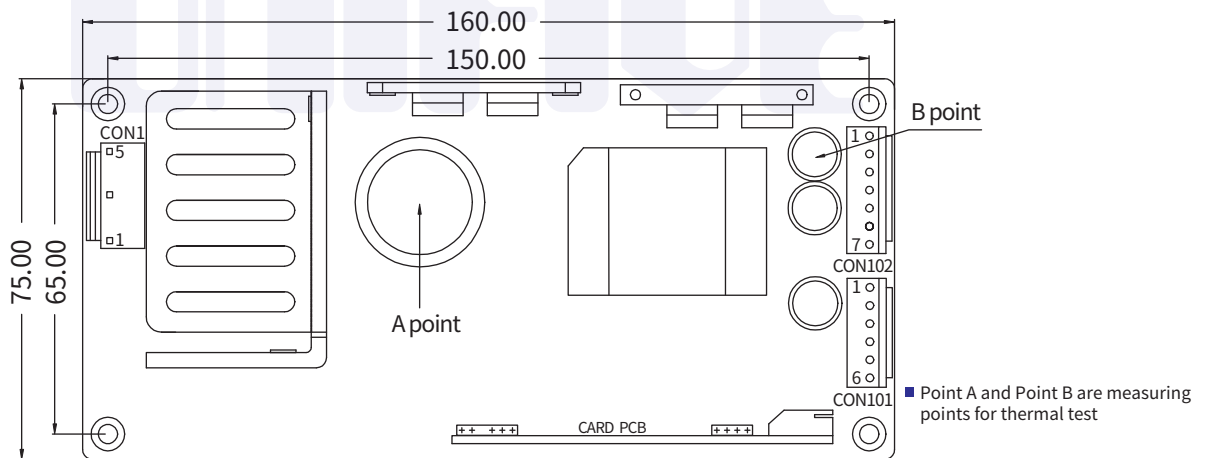
Measuring points and thermal test:

② (D),(E),(F) Mounting    ② (C) Mounting    ② (B) Mounting    ② (A) Mounting    ① (A)-(F) Mounting



Point A and point B are indicated in mechanical spec:

## UOHC3150 Series



Mounting Method	Cooling Method	Load factor	Max temperature	
			Point A(°C)	Point B(°C)
A	Convection	75% < I <sub>o</sub> ≤ 100%	73	72
		50% < I <sub>o</sub> ≤ 75%	77	75
		0% < I <sub>o</sub> ≤ 50%	82	80
B	Convection	75% < I <sub>o</sub> ≤ 100%	70	70
		50% < I <sub>o</sub> ≤ 75%	75	75
		0% < I <sub>o</sub> ≤ 50%	80	80
C	Convection	75% < I <sub>o</sub> ≤ 100%	70	70
		50% < I <sub>o</sub> ≤ 75%	75	75
		0% < I <sub>o</sub> ≤ 50%	80	80
D	Convection	75% < I <sub>o</sub> ≤ 100%	70	70
		50% < I <sub>o</sub> ≤ 75%	75	75
		0% < I <sub>o</sub> ≤ 50%	80	80
E	Convection	75% < I <sub>o</sub> ≤ 100%	70	70
		50% < I <sub>o</sub> ≤ 75%	75	75
		0% < I <sub>o</sub> ≤ 50%	80	80
F	Convection	75% < I <sub>o</sub> ≤ 100%	70	70
		50% < I <sub>o</sub> ≤ 75%	75	74
		0% < I <sub>o</sub> ≤ 50%	85	83
A,B,C,D,E,F	Forced air	70% < I <sub>o</sub> ≤ 100%	68	68
		0% < I <sub>o</sub> ≤ 70%	68	68