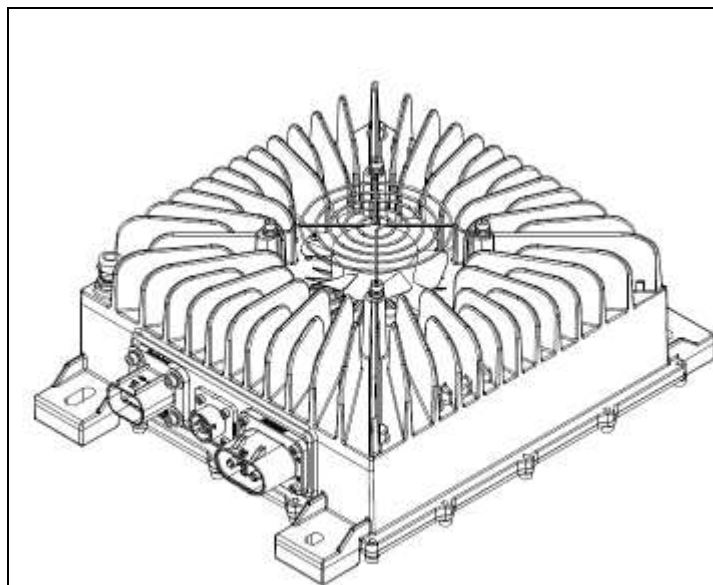


Input DC 36-60V Output 14.5V 1.5KW DC/DC Converter Fan Cooled Isolated Model No. ATRD1K5-48S14.5FI



Features

- 1 Output Power: 1.5KW
- 2 Input Voltage Range(VDC): 36-60
Rated Input Voltage(VDC): 48
- 3 Output Voltage Range(VDC): 0~16
- 4 Rated Output Voltage(VDC): 14.5
- 5 Output Current Range(A): 0~144
Rated Out Current(A): 110
- 6 Dimensions(mm): 328 x 260 x 121
- 7 Weight(KG): ≤ 6.8
- 8 Cooling System: Fan
- 9 IP Rating: IP67
- 10 CAN compatibility: CAN2.0 B SAE J1939
- 11 Enclosure: Aluminum alloy
- 12 Isolated: Supported
- 13 Software: Digital software design
- 14 Online Upgrade & Fault Diagnosis: Supported

Specification

Description		Remark
Input Voltage Range (VDC)	36-60	
Rated Input Voltage (VDC)	48	Adjustable as per requirement
Output Voltage Range(VDC)	0-16	
Rated Output Voltage(VDC)	14.5	Adjustable as per requirement
Rated Output current(A)	110	
Efficiency	≥90%	Rated input voltage, load > 30%
Output Voltage Ripple	≤500mV _{PK-PK}	
Output Voltage Accuracy	±1%	
Communication Method	CAN-BUS J1939	
Quiescent Current	≤2mA	Battery current will be consumed in sleep/standby mode
Isolation	supported	

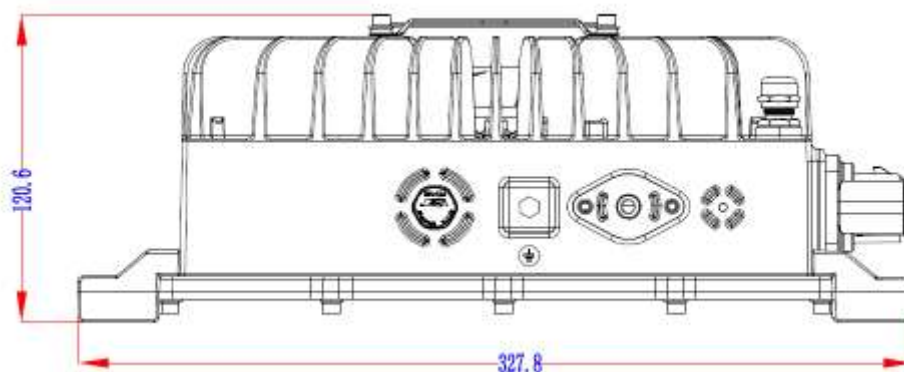
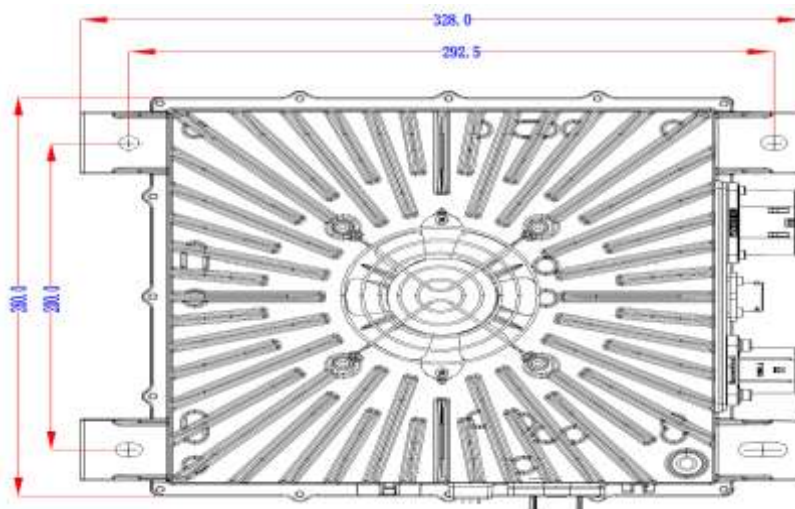
Operating Environment

The operating environment conditions of this assembly are as follows:

Items	Descriptions		Remark
1.	Operating Temperature(°C)	40-85	The power will be derated when the temperature exceeds 65°C
2.	Storage Temperature(°C)	40-95	



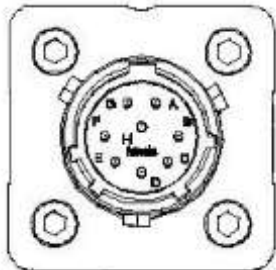
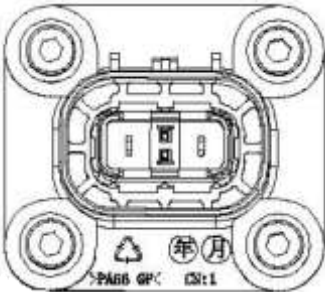
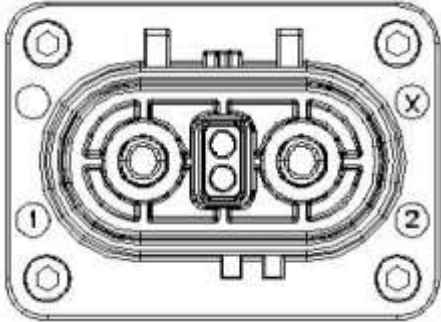
3.	relative humidity(%RH)	5~95	No condensation, no frost
4.	Protection level	IP67	
5.	Cooling method	Fan	
6.	Vibration level	ISO 16750-3,2012 (E)	After X,Y,Z three directions of sweep frequency vibration testing, no damage for parts , no loose for fastening piece
7.	Noise level(dB)	65	Meet QC /T895-2011
8.	Salt spray level	GB/T 2423.17	
9.	Altitude(M)Max	3000	GB/T16935.1-2008
10.	Fall	Wiring harness according to QC/T417.1-2001 Housing according to GB/T 2423.8-1995	Appearance, structure and performance are normal
11.	Protection Characteristics	OTP& OVP & UVP& SCP	
12.	Electromagnetic immunity	GB/T17619-1998 chap4	
13.	Electromagnetic disturbance	GB18655-2002chap 12 chap14	



**Connector Model: Adjustable as per requirement****Connector Model**

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	Huzheng	FPT20N21208PN	FPT60N21208SN
2	HV DC input	Recodeal	RED-T2PAH-2.5-A	RED-Z2PAH-2.5-A
3	Output +	Huzheng	FHV221268CX-UM61J	FHV601268CX-35U02J
4	Output -			

Interface Definition

Signal Control(1)		HV DC Input(2)		Output Positive(3)	
					
A	CAN L	1	Input +	1	Output +
B	CAN H	A	HVIL_IN	2	Output -
C	12V+ Enable	2	Input -		
D	12V-OUT	B	HVIL_OUT		
E	HVIL				
F	HVIL				