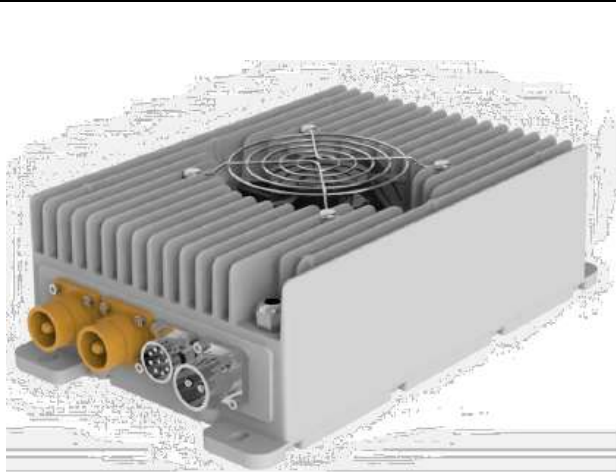




## Input 250-365V1.5KW DC/DC Converter Fan Model No. ATRD1K5-307S138F



3D file no. ATRD1K5-F\_902.26610202.00

**Features**

- 1 Output Power(KW): 1.5
- 2 Input Voltage Range(VDC): 250-365  
Nominal Voltage(VDC): 307
- 3 Output Voltage Range(VDC): 9~15
- 4 Rated Output Voltage(VDC): 13.8(13.4~14.2)
- 5 Output Current Continuous(A): 75(1000W)  
Peak(A): 110@1 Min(1500W)
- 6 Weight(KG): ≤ 3.5
- 7 Cooling System: Fan
- 8 IP Rating: IP67
- 9 CAN compatibility: CAN2.0 B SAE J1939
- 10 Enclosure: Aluminum alloy
- 11 Isolated: Supported
- 12 Software: Digital software design
- 13 Online Upgrade & Fault Diagnosis: Supported

**Specification**

Description		Remark
Efficiency	≥95%	Rated input voltage, load > 30%
Output Voltage Ripple	≤ 200mVp-p	
Output Voltage Accuracy	±1%	
Communication Method	CAN 2.0 BUS	
CAN Baud Rate(Kbps)	500	
Can frame format(ID)	Extended	
Can byte order	Intel	
Quiescent Current	<100μA	Battery current will be consumed in sleep/standby mode

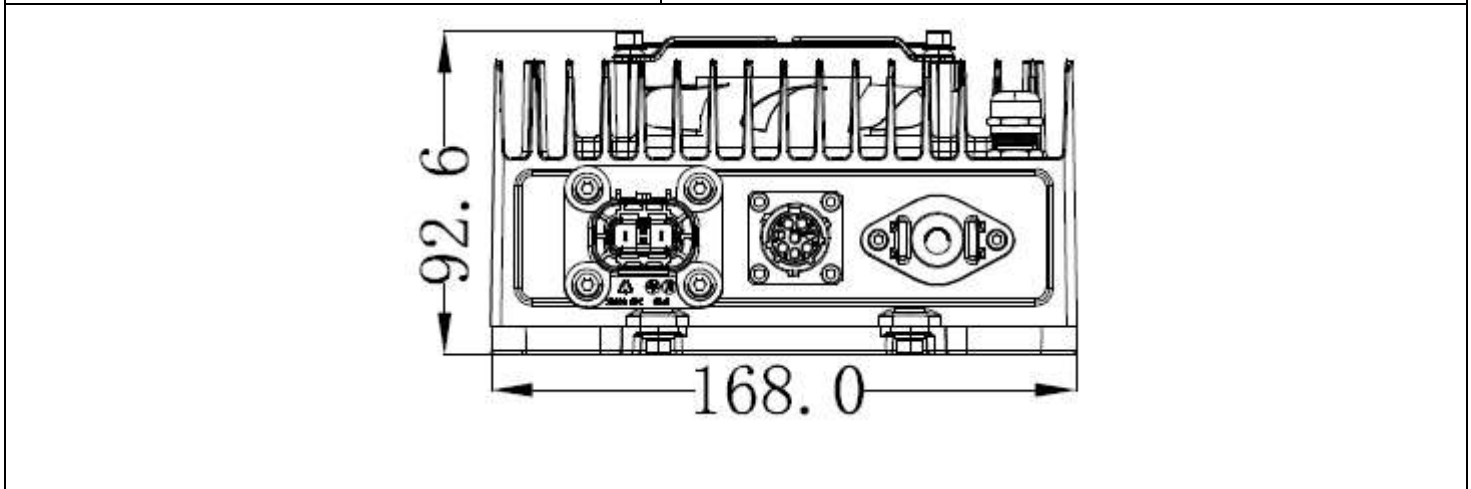
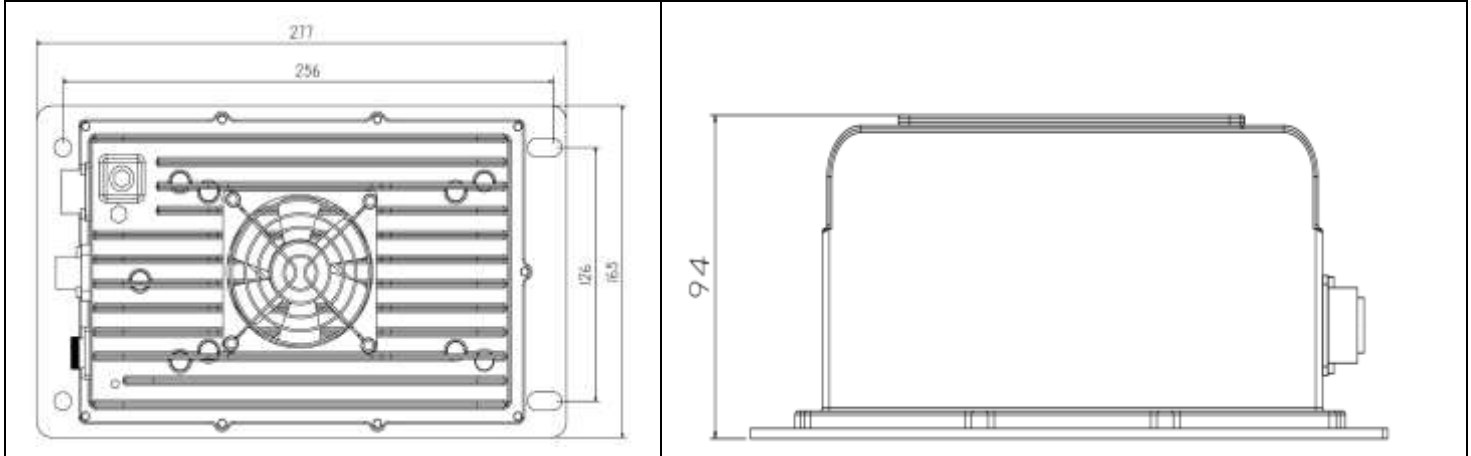
**Operating Environment**

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)	-40~105	
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)	<60	
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	Input OVP/UVP, output OVP/UVP, input anti-reverse connection, output short circuit protection, OCP, OTP	
12.	Electromagnetic immunity	GB/T17619-1998 chap4	
13.	Electromagnetic disturbance	GB18655-2002chap 12 chap14	

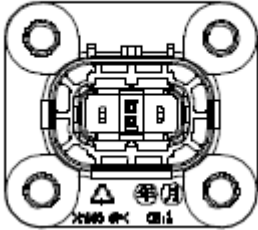
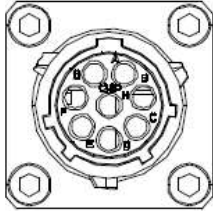





Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	HV DC input	RECODEAL	RED- ZM2PAH-2.5-A	RED- TM2PAH-2.5-A
2	Signal control	Amphenol	RT00128PN03	RT06128SNHEC03
3	Output +	GUWEITONG	GH01-F200-1NNB-T08	M8 BOLT

Interface Definition

HV DC Input(1)		Signal Control(2)		Output Positive(3)	
					
1	Input + 2.5MM2	A	CANH	1	Output +
2	Input -2.5MM2	B	CANL 0		
A	HVIL +	C	KL15		
B	HVIL -	D	KL30		
Cable Size: 1/2: 2.5mm2 A/B: 0.75mm2		E	KL31		
		F	HVIL +		
		G	HVIL -		
		H	N/C		
		CABLE SIZE: 0.75MM2		110A 25MM2	

**Cable Current Rating Table for reference only.** The actual current-carrying capacity shall be based on the cable manufacturer's specifications

CURRENT (A)	CABLE SIZE (MM2)	CURRENT (A)	CABLE SIZE (MM2)	CURRENT (A)	CABLE SIZE (MM2)
7	0.75	60	10	250	70
22	2.5	80	16	300	95
25	3	125	25	350	120
30	4	150	35		
40	6	200	50		