



300-800VS27 1.2KW DC/DC Converter Fan Cooled Model No. ATRD1K2-640S27F



Features

- 1 Output Power: 1.2KW
- 2 Input Voltage Range(VDC): 300-800
- 3 Output Voltage Range(VDC): 0~34
- 4 Rated Output Voltage(VDC): 27
- 5 Output Current Max(A): 42
- 6 Dimensions(mm): 277 x 165 x 94
- 7 Weight(KG): ≤ 2
- 8 Cooling System: Fan
- 9 IP Rating: IP67
- 10 CAN compatibility: CAN2.0 B
- 11 Enclosure: Aluminum alloy
- 12 Pre-charge & isolated: Supported
- 13 Software: Digital software design
- 14 Online Upgrade & Fault Diagnosis: Supported

Specification

Description		Remark
Input Voltage Range (VDC)	300-800	
Rated Input Voltage (VDC)	640	Adjustable as per requirement
Output Voltage Range(VDC)	0-34	
Rated Output Voltage(VDC)	27	Adjustable as per requirement
Output current(A) Max.	42	
Efficiency	$\geq 92\%$	Rated input voltage, load $> 30\%$
Output Voltage Ripple	$\leq 500\text{mV}_{\text{PK-PK}}$	
Output Voltage Accuracy	$\pm 1\%$	
Communication Method	CAN-BUS J1939	
Quiescent Current	$\leq 2\text{mA}$	Battery current will be consumed in sleep/standby mode
Pre charge	embedded	

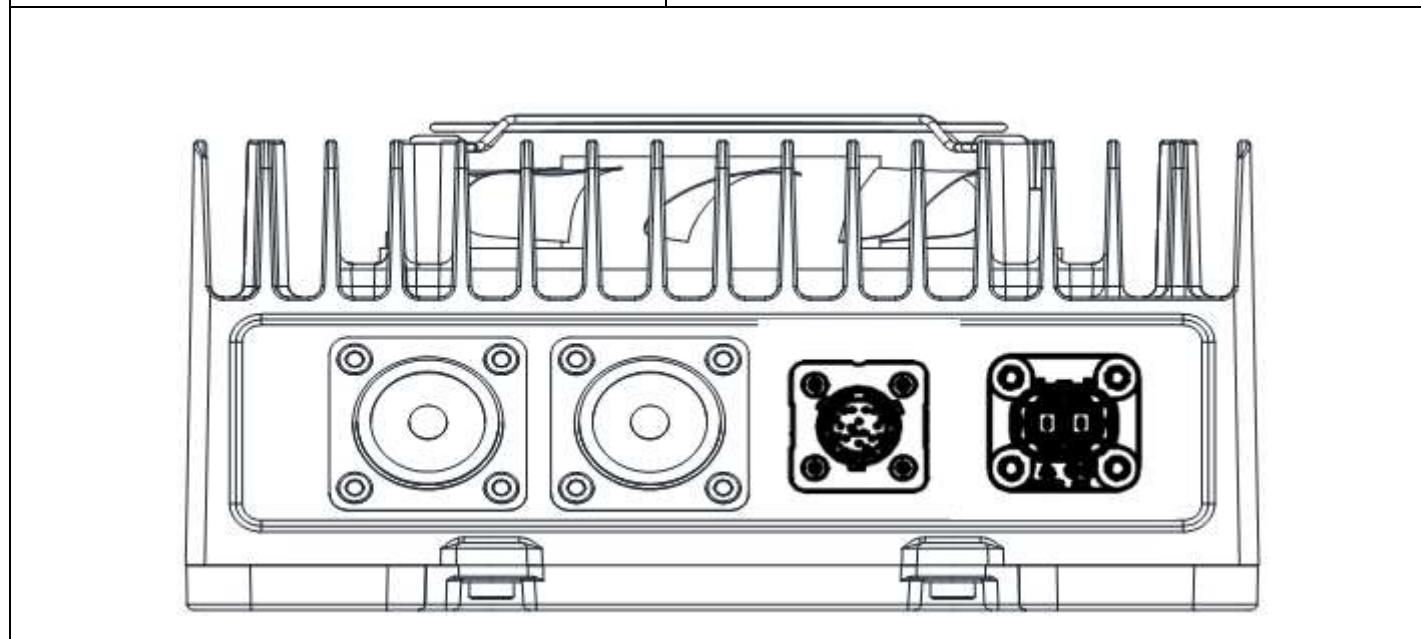
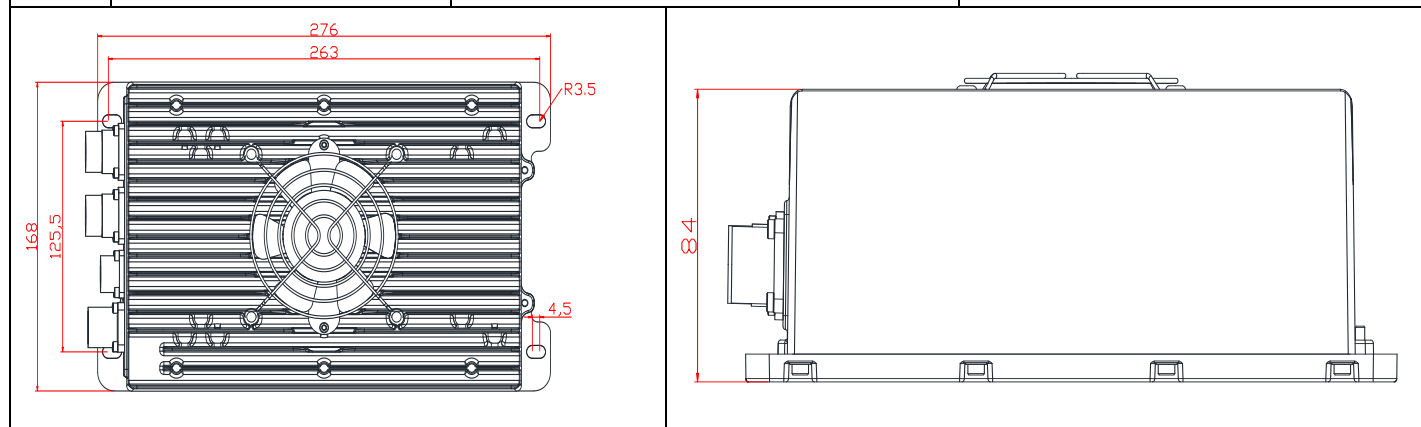
Operating Environment

The operating environment conditions of this assembly are as follows:

Items	Descriptions		Remark
1.	Operating Temperature($^{\circ}\text{C}$)	40-85	The power will be derated when the temperature exceeds 65°C
2.	Storage Temperature($^{\circ}\text{C}$)	40-95	
3.	relative humidity(%RH)	5~95	No condensation, no frost



4.	Protection level	IP67	
5.	Cooling method	Natural	
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	Input OVP/UVF, output OVP/UVF, input anti-reverse connection, output short circuit protection, OCP, OTP	
12.	Electromagnetic immunity	GB/T17619-1998 chap4	
13.	Electromagnetic disturbance	GB18655-2002chap 12 chap14	





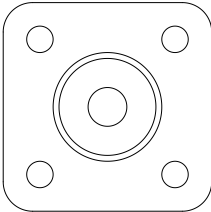
Connector Model:

Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	Huuzheng	FPT20N21208PN	FPT60N21208SN
2	HV DC input	RECODEL	RED-T2PAH-2.5-A	RED-Z2PAH-2.5-A
3	Output +		Leishen	
	Output -		Leishen	

Interface Definition

1	RED-T2PAH-2.5-A	1	输入+	2.5mm ²	
		2	输入-	2.5mm ²	
		A	HVIL	0.75mm ²	
		B	HVIL	0.75mm ²	
2	FPT20N21208PN	A	CANL	0.75mm ²	
		B	CANH	0.75mm ²	
		C	Enable	0.75mm ²	
		D	12V-OUT	0.75mm ²	
		E	HVIL	0.75mm ²	
		F	HVIL	0.75mm ²	
		G-H	TBD		

Output Positive(3)	
	
Through-the-wall terminals	
	Output +
	Output -