



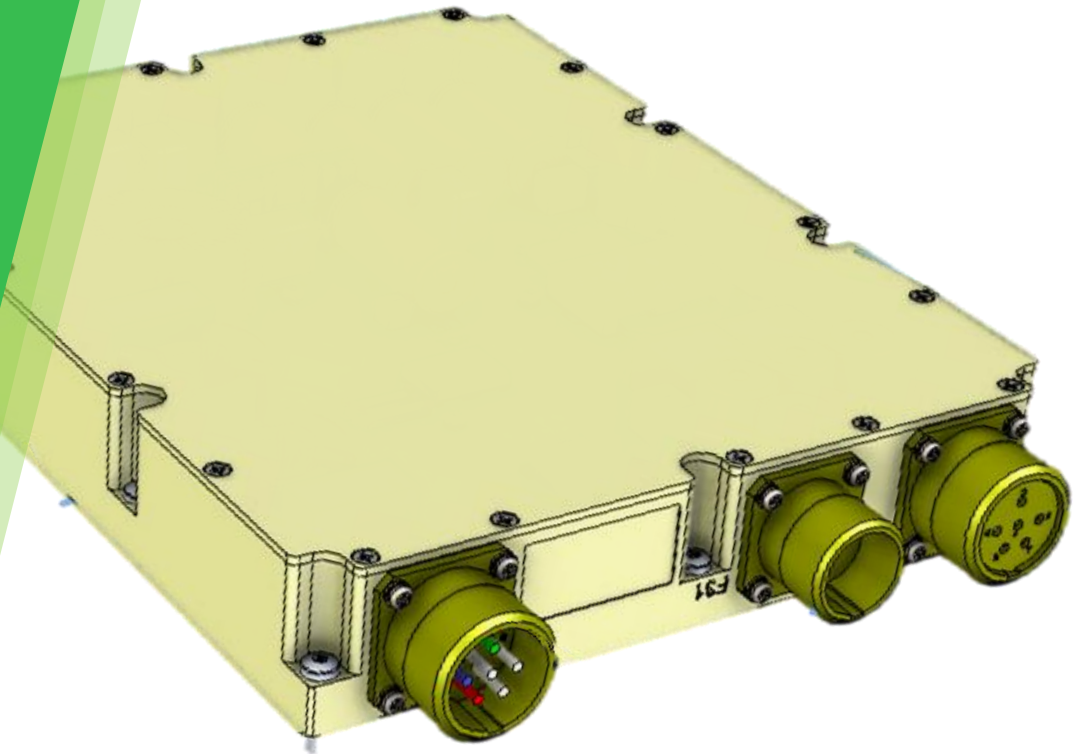
OHM
POWER
SOLUTIONS

AD1650

1650Watt

DOUBLE OUTPUTS

AC/DC Converter





Features:

- Single phase input - designed to meet MIL-STD-1399
- High Efficiency – up to 94%
- Fully protected for Over Load/Short, Over-voltage and Over-Temperature
- Two isolated outputs
- Base Plate cooling
- Designed to meet MIL-STD-461G

Typical applications:

- Military
- Ruggedized
- Telecom
- Industrial





General specification	
AC Input	
Input voltage range	82-270V _{AC} (Single phase)
Frequency (Hz)	47-63
Power Factor	> 0.9
Protection	Input under voltage Protection: Turn off under 80Vac, turn on at 85VAC
DC Output	
Output voltage / Current	See table below
Line Load & Temperature regulation	< +/-2%
Current limit on each output	115% - 130% of rated current
OVP	Over-Voltage on each output - Non-latch type
Turn on Transient	No turn on transient
Isolation	
INPUT to OUTPUT	1000 V _{DC}
INPUT to CASE	1000 V _{DC}
OUTPUT to CASE	200 V _{DC}
Interface	
Control and indication signals	AC_GOOD, DC_GOOD and OVER_TEMP signals: 3.3V or 5V with at least 25mA drive capability at good state. BATTLE_SHORT, ENABLE_54V, ENABLE_28V: Active low - short for enable, Cut-off for disable
AC_GOOD	AC input is within steady state operating range
DC_GOOD_54V	High when 54V voltage is within +/-4%
DC_GOOD_28V	High when 28V voltage is within +/-4%
OVER_TEMP	Low when baseplate temperature is 85 +/- 4%
BATTLE_SHORT	overrides the all protections in battle condition
ENABLE_54V	Enables 54V output
ENABLE_28V	Enables 54V output
Environmental	
Operating Temperature	-40°C to +80°C Base plate
Over-Temperature protection	to +95°C with auto recovery at +85°C
Shock & Vibration	per MIL-STD-810G
EMI-RFI	per MIL-STD-461G
Mechanical	
Size L x H x W (mm)	250x200x38
Weight (grams)	3000
Cooling	Base plate
Input/Output connector	INPUT – AMPHENOL P/N: D38999/20WE6PN or Eq. CTRN – AMPHENOL P/N: D38999/20WD35SN or Eq. OUTPUT – AMPHENOL P/N: D38999/20WE6SN or Eq.



Ordering information

MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	POWER (W)	POWER TOTAL (W)	R&N (mV)
RBI VECTRIA	+54VDC	82-270V _{AC}	54.0V	28	1512	1624	50
	+28VDC	47-63Hz Single phase	28V	4	112		50

OUTPUT F31 PIN – Assignment

PIN #	PIN Function	PIN #	PIN Function
1	28V output	20	BATTLE_SHORT_RET
2	28V output	21	SPARE
3	28V output	22	SPARE
4	28V output_RET	22	SPARE
5	28V output_RET	23	SPARE
6	28V output_RET	24	SPARE
7	28V_DC_GOOD	25	SPARE
8	28V_DC_GOOD_RET	26	SPARE
9	28V_ENABLE	27	SPARE
10	28V_ENABLE_RTN	28	SPARE
11	54V_DC_GOOD	29	SPARE
12	54V_DC_GOOD_RET	30	SPARE
13	54V_ENABLE	31	SPARE
14	54V_ENABLE_RET	32	SPARE
15	AC_GOOD	33	SPARE
16	AC_GOOD_RET	34	SPARE
17	OVER_TEMP	35	SPARE
18	OVER_TEMP_RET	36	SPARE
19	BATTLE_SHORT	37	SPARE

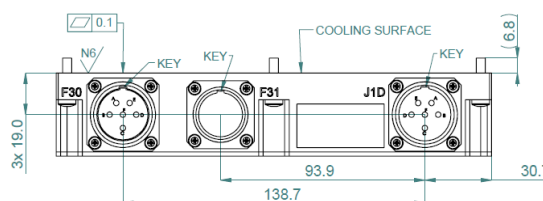
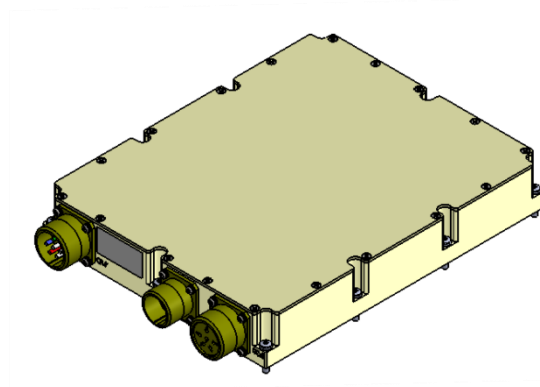
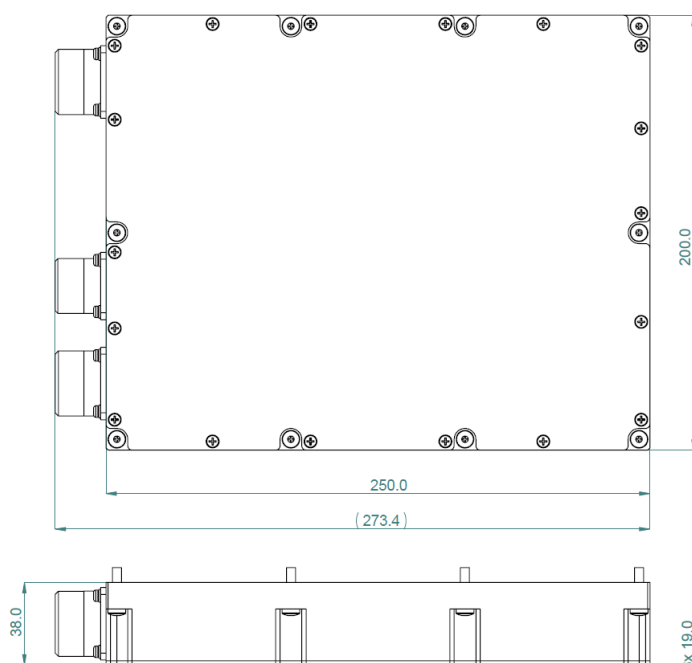
INPUT J1D PIN – Assignment

PIN #	PIN Function
A	Input Phase
B	Input Phase
C	Neutral
D	Neutral
E	Chassis GND
F	N.C.

OUTPUT F30 PIN – Assignment

PIN #	PIN Function
A	54V_RET
B	54V
C	54V
D	54V_RET
E	54V_RET
F	54V_RET

Outline Drawing



Note: Specifications are subject to change without prior notice by the manufacturer.
Additional configurations and modifications available. Contact us for more details.