VLT130 Series

130W single and quad output AC/DC Power Supplies

High density and high efficiency are featured in the VLT130 AC/DC power supply. EOS brand VLT130 family of power supplies utilize our patented resonant technology in a slim line 5.0"x3.14"x1.025" package and 82% power conversion efficiency. Single and quad outputs in all popular DC output configurations are available ranging from 3.3v to 48v and single wire current share.

Packing over 8 watts per cubic inch the dual-channel VLT130 family is ideal for data networking, industrial and multimedia applications. VLT130 has auto ranging 90v to 264v input and meets EN55022-B, FCC Part 15 Level B Noise and Class 2 safety approvals. The VLT130 family is RoHs compliant and our factory is ISO 14001 environmentally approved. Worldwide safety standards apply and the power supply is fitted with OVP and OCP standard features as well as 1+1 redundancy and harmonic correction.



Eas

Features :

- > 130 W fan cooled rating.
- > Smallest 130W Ac/Dc power Supply
- > Small 5.0x3.04x1.025 inch form factor.
- > Dual channel output
- > EN61000-3-2 class A harmonics.
- > EN55022 and FCC Part 15 Level B
- > Cover Kit accessory available.

Model Number	Output	Output Voltage	Set Point	Current No Fan	Current 15CFM
VLT130-1106 ²	V1	3.3V	3.3V	20.0A	32.0A
VLT130-1100 ²	V1	5V	5.1V	16.0A	25.5A
VLT130-1101 ²	V1	12V	12.0V	6.6A	10.8A
VLT130-1102 ²	V1	15V	15.0V	5.4A	8.7A
VLT130-1103 ²	V1	24V	24.0V	3.3A	5.4A
VLT130-1104 ²	V1	48V	48.0V	1.7A	2.7A
VLT130-4100	V1	5V	5.1V	10.0A	14.0A
	V2	3.3V	3.3V	10.0A	16.0A
	V3	12V	12.7V	1.0A	1.5A
	V4	-12V	-12.7V	1.0A	1.5A
VLT130-4101	V1	5V	5.1V	10.0A	14.0A
	V2	3.3V	3.3V	10.0A	16.0A
	V3	24V	24.0V	1.0A	1.5A
	V4	-12V	-12.7V	1.0A	1.5A
VLT130-4102	V1	5V	5.1V	10.0A	14.0A
	V2	3.3V	3.3V	10.0A	16.0A
	V3	15V	16.3V	1.0A	1.5A
	V4	-15V	-16.3V	1.0A	1.5A
VLT80CK	Metal cover kit accessory				

INPUT SPECIFICATION		
AC Input	Auto Ranging	90 to 132V 180 to 264V
Efficiency		82% Typical
Input Frequency		47-63 Hz
Input Current	Full Load at low line	2.9Arms , max
Inrush Current	High Line , cold start	40A,max

All Red Rocket, Inc. EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at <u>www.redrocketpower.com</u> and contact us at: <u>sales@redrocketpower.com</u> or by calling +1 805-409-0909 today. © 2008, Red Rocket, Inc. EOS brand power supplies and patents are owned exclusively by Red Rocket, Inc. All Rights Reserved.



VLT130 Series

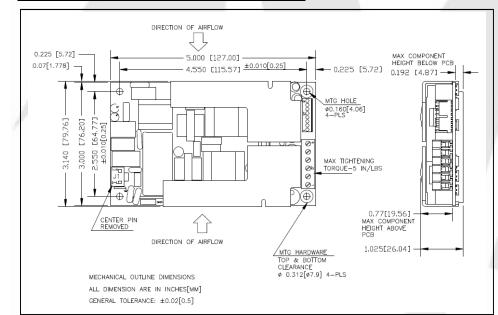
130W single and quad output AC/DC Power Supplies

OUTPUT SPECIFICATION		
Output Power ^{4.5}	All Outputs No Fan All Outputs with Fan	80W max 130W max
DC Output		See Table
Hold-Up Time	115V/230V	10ms
Set Point Accuracy	V1 and V2 V3 and V4	<u>+</u> 1% <u>+</u> 5%
Line Regulation	Low line to high line	<u>+</u> 0.3%
Load Regulation	Mini to 50% & 50% Max Load V1 and V2 V3 and V4	<u>+</u> 1% <u>+</u> 5%
Minimum Load	V1 & V2 V3 & V4	0.5A 0.1A
Transient Response to full load	50% to Full Load Voltage deviation Recovery Time	<7% <1ms
OVP	3.3V Output 5V Output	5.1V, <u>+</u> 0.5V 6.2V, <u>+</u> 0.4V
Overload Protection	Primary limited	195W, <u>+</u> 35W
Short Circuit Protec- tion	Auto recovery <6s	Short Term
Ripple and Noise	3.3V & 5V Other voltages	50mV 1%
Power Fail Signal ²	TTL	2ms warning
Remote Sense	Line compensation on V1 and V2	400mV
Power Good ²	Delay after V1 high	30ms, min
Output Rise Time		<10ms
Redundancy	130W Max	1+1
Paralleling Function		No

ENVIRONMENTAL SPECIFICATION			
Operating Tem- perature	No derating	0 to 50° C	
Storage Temperature		-40 to 85° C	
Cooling	Convection	80W	
Relative humidity	Non condensing	95%, max	
MTBF	Bellcore TR332	>150,000 hrs	

EMC AND SAFETY SPECIFICATIONS

CE Mark	Complies with the LVD
EMC	EN5022-B,CISPR22-B, FCC Part 15 Class B, EN50082-1
Agency Approval	VDE , UL, c-UL
Safety Standard	IEC60950,EN60950, UL60950, Class 1 SELV
Safety File Number	VDE: 18934-3336 UL: E150565



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MECHANICAL SPECIFICATION		
AC Input Connector J1	Molex 3 position, 0.156 center Header 26-60-4030 or equivalent	
Ground Connector	Spade connector.	
DC Output connector J2	Tyco 282841-6 terminal block or equivalent	
Output connector J3	Molex22-23-2081 or equivalent	
Size	5.0x3.14x1.025"	
Weight	12oz (340g)	

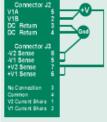
INPUT CONNECTOR J1			
Pin1	Neutral		
Pin2	Line		
INPUT SPADE CONNECTOR			
GND	AC Ground		

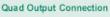
OUTPUT CONNECTOR J2			
	Single Output	Quad Output	
Pin1	No Connection	V3	
Pin2	V1B	V3	
Pin3	Dc Return	DC Return	
Pin4	Dc Return	Dc Return	
Pin5	V1A	V1	
Pin6	No Connection	V4	

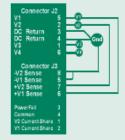
OUTPUT CONNECTOR J3		
	Single Output	Quad Output
Pin1	V1 Current Share	V2 Current Share
Pin2	V1 Current Share	V1 Current Share
Pin3	No Connection	Power Fall
Pin4	Common	Common
Pin5	-V1A Sense	-V1 Sense
Pin6	+V1A Sense	+V1 Sense
Pin7	+V1B Sense	+V2 Sense
Pin8	-V1B Sense	-V2 Sense



Single Output Connection



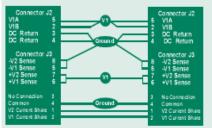




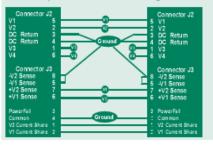
To connect the voltage sense pins 5,6,7 and 8 on connector J3 to the load, it is recommended to use 0.22 gauge twisted pair wire.
For single output units, an internal 0 ohm resistor shurt is used to internally connect the current share pins VIA Current Share (J3-2) and VIB Current share (J3-1).

 Pins J3-4, Common, should be connected to ground for correct operation.
The Power Fail signal J3-3 is a TTL active high signal. The maximum source current is 0.45mA and the maximum sink current is 0.25mA

Single Output 1+1 Redundant Configuration



Quad Output 1+1 Redundant Configuration



Note:

- Maximum current per output. Do not exceed 1.
- maximum output power rating. Power good and Power Fail signal on quad 2. output models only.
- 3. The use of the Remote Sense function required 15CFM airflow.
- 4. Quad output Models: The output section of the VLT130-4XXX is split into 2 independently regulated channels. Channel A consists of the main output V1 and auxiliary output v4. channel B consist of the main output V3 and auxiliary output V3. The maximum output power that may be drawn per channel is 45W with convection cooling or 65W with fan cooling.
- Single output models: The output section of the 5. VLT130-1XXX is split into 2 independently regulates channels. Channel A consist of the main output V1A. Channel B consist of the main output V1B. An internal shunt resistor of value 0 ohms connect both channels of the power supply. In an event whereby this shunt resistor is removed, the maximum output power that may be drawn per channel is 45W with convection cooling or 65W with fan cooling.

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