

VLT150 Series

150W single and quad output AC/DC Power Supplies

VLT150 AC/DC power supply features the trademark EOS brand high density and high efficiency. EOS brand VLT150 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 10 watts per cubic inch the VLT150 family is ideal for 1U height data networking, industrial and multimedia applications. VLT150 has universal 90v to 264v input and meets EN55022-B, FCC Part 15 Level B Noise and Class A and D Harmonics. The VLT150 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.



Features :

- > 150 W fan cooled rating.
- > Smallest 150W Ac/Dc power Supply
- > Small 5.0x3.14x1.025 inch form factor.
- > Dual channel output
- > EN61000-3-2 class A & D harmonics.
- > EN55022 and FCC Part 15 Level B
- > Cover Kit accessory available.

Model Number	Output	Output Voltage	Set Point	Current No Fan	Current 300LFM
VLT150-1106 ⁵	V1	3.3V	3.3V	20.0A	36A
VLT150-1100 ⁵	V1	5V	5.1V	15.7A	29.4A
VLT150-1101 ⁵	V1	12V	12.0V	6.7A	12.5A
VLT150-1103 ⁵	V1	24V	24.0V	3.3A	6.25A
VLT150-1104 ⁵	V1	48V	48.0V	1.7A	3.13A
VLT150-4100 ⁴	V1	5V	5.1V	10.0A	16.0A
	V2	3.3V	3.3V	10.0A	19.0A
	V3	12V	13.0V	1.0A	1.0A
	V4	-12V	-13.2V	1.0A	1.0A
VLT150-4101 ⁴	V1	5V	5.1V	10.0A	16.0A
	V2	3.3V	3.3V	10.0A	19.0A
	V3	24V	24.0V	1.0A	1.0A
	V4	-12V	-13.2V	1.0A	1.0A
VLT150-4102 ⁴	V1	5V	5.1V	10.0A	16.0A
	V2	3.3V	3.3V	10.0A	19.0A
	V3	15V	15.0V	1.0A	1.5A
	V4	-15V	-15.0V	1.0A	1.0A
VLT80CK Metal cover kit accessory					

INPUT SPECIFICATION		
AC Input	Universal	90 to 264V
Efficiency		>85% Typical
Input Frequency		47-63 Hz
Input Current	Full Load at low line	4Arms , max
Inrush Current	High Line , cold start	65A,max
Leakage Current		<3.5mA

- 1) Maximum current per output channel. Do not exceed total output power rating.
 2) Power fail & Power good signal on quad output models only.

All 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 www.eospower.com. EOS brand power supplies and patents are owned exclusively by EOS Power. All Rights Reserved.



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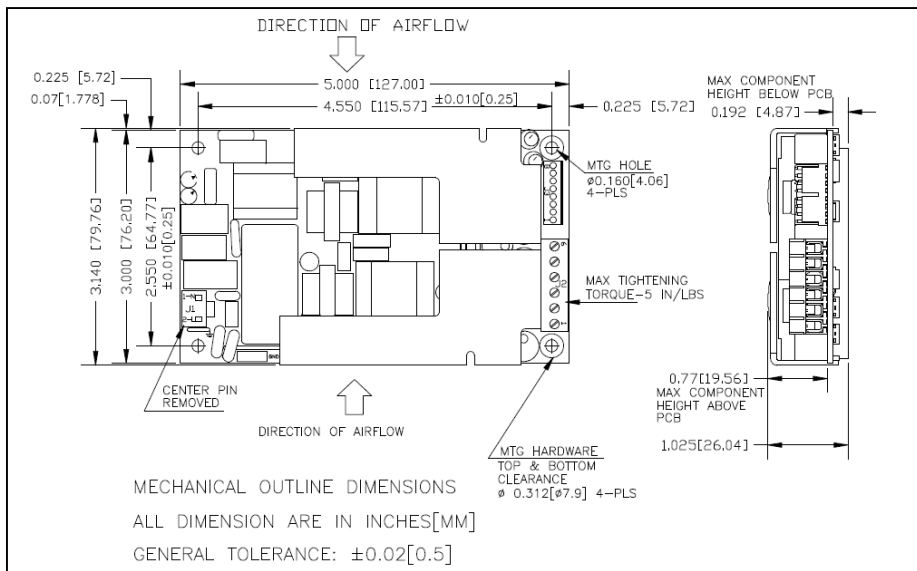
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OUTPUT SPECIFICATION		
Output Power ^{4,5}	All Outputs No Fan All Outputs 300 LFM	80W max 150W max
DC Output		See Table
Hold-Up Time	115V/230V	10ms
Set Point Accuracy	V1 and V2 V3 and V4	±1% ±5%
Line Regulation	Low line to high line	±1%
Load Regulation	Min to 50% & 50% to Max Load V1 and V2 V3 and V4	±1% ±5%
Minimum Load Single o/p models; Other models	3.3V & 5V V1 & V2 V3 & V4	3A 0.5A 0.1A
Output Capacitance	V1 & V2 V3 & V4	3000µF 330µF
Transient Response	50% to Full Load Voltage deviation Recovery Time	<7% <1ms
OVP	3.3V Output 5V Output	4V to 5.15V 5.8V to 6.6V
Output Overshoot	Turn On	<5%
Overload Protection	Primary limited	215W, ±35W
Short Circuit Protection	Auto recovery <6s	Short Term
Ripple and Noise	3.3V & 5V Other voltages	50mV 1%
Power Fail Signal ²	5V Line	1ms warning
Remote Sense ³	Line compensation on V1 and V2	100mV
Power Good ²	Delay after V1 high	30ms, min
Output Rise Time		<10ms
Redundancy		1+1
Paralleling Function		No

ENVIRONMENTAL SPECIFICATION		
Operating Temperature	No derating	0 to 50° C
Storage Temperature		-40 to 85° C
Cooling	Convection 300 LFM	150W
Relative humidity	Non condensing	95%, max
MTBF	Bellcore TR332	>100,000 hrs

EMC AND SAFETY SPECIFICATIONS	
CE Mark	Complies with the LVD
EMC	EN5022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1
EMC Susceptibility	EN61000-4-2, EN61000-4-4, EN61000-4-5 level 3
Harmonic Correction	EN61000-3-2 Class D
Agency Approval	UL, c-UL, NEMKO
Safety Standard	IEC60950, EN60950, UL60950, CSA, C22.2 No. 60950 Class 1 SELV
Safety File Number	UL: 150565 NEMKO: 165490



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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.
Output connector J2	Tyco 282841-6 terminal block or equivalent
Output connector J3	Molex22-23-2081 or equivalent
Size	5.0x3.14 x 1.025"
Weight	12oz (340g)

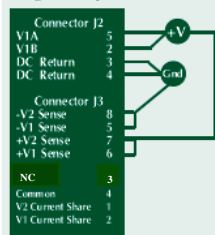
INPUT CONNECTOR J1	
Pin1	Neutral
Pin2	Line

INPUT SPADE CONNECTOR	
GND	AC Ground

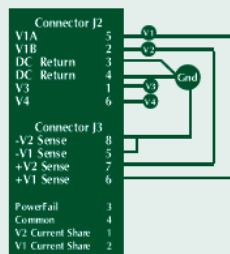
OUTPUT CONNECTOR J2		
	Single Output	Quad Output
Pin1	No Connection	V3
Pin2	V1B	V2
Pin3	Dc Return	DC Return
Pin4	Dc Return	Dc Return
Pin5	V1A	V1
Pin6	No Connection	V4

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 Fail
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

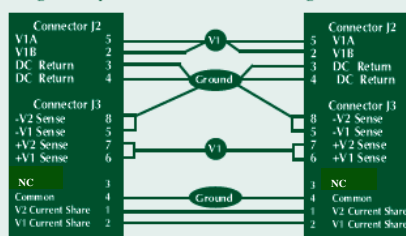


Quad Output Connection

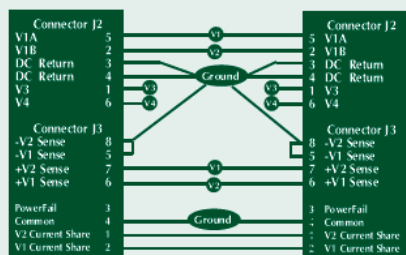


1. To connect the voltage sense pins 5,6,7 and 8 on connector J3 to the load, it is recommended to use 0.22 gauge twisted pair wire.
2. For single output units, an internal 0 ohm resistor shunt is used to internally connect the current share pins V1A Current Share (J3-2) and V1B Current share (J3-1).
3. Pins J3-4, Common, should be connected to ground for correct operation.
4. 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:

1. Maximum current per output. Do not exceed maximum output power rating.
2. Power good and Power Fail signal on quad output models only.
3. The use of the Remote Sense function required 300LFM airflow.
4. Quad output Models: The output section of the VLT150-4XXX 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 V2 and auxiliary output V3. The maximum output power that may be drawn per channel is 55W with convection cooling or 75W with fan cooling.
5. Single output models: The output section of the VLT150-1XXX is split into 2 independently regulated 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 55W with convection cooling or 75W with fan cooling.

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