

## 550 to 900W Multiple Output Modular Power Supply

**RoHS**



- ◆ Suitable for higher volume applications
- ◆ 1-10 Wide Range Outputs With Adjustment
- ◆ Output Voltages From 1.8 - 56V
- ◆ Medical Approval Options
- ◆ MIL-STD-810 Shock and Vibration

Vega Features and Benefits	
Feature	Benefit
◆ PFC compliant to EN61000-3-2	◆ Supports global use
◆ Wide Range Output Adjustment	◆ Capable of providing non-standard voltages, eliminating the need for custom models
◆ Safety Agency Approvals EN, cULus, BSI, CE	◆ Supports worldwide use, lowers risk to end user
◆ Flexibility with option choices	◆ Custom solutions available off the shelf

Specifications		MODELS	VEGA Lite 550	VEGA Lite 750
ITEMS				
Input Voltage Range	(1)	-	85-264VAC 47-63Hz(2)	85-264VAC 47-63Hz(2)
Efficiency (Typ.)		%	75% at 230VAC and full load, configuration dependent	
Nominal Output Voltages		VDC	1.8 - 56V (See page 2)	
Output Voltage Adjustment		-	Wide range, via potentiometer or remote adjust pin, module dependent	
Minimum Load		A	0A	
Max Output Power	(3)	W	700 (3)	900 (3)
Max Ripple & Noise (pk-pk)		mV	< 1% (or 50mV which ever is greater) using EIAJ test method & 20MHz bandwidth	
Regulation (load, line, cross)		%	Less than 0.5%	
Hold Up Time		ms	16ms min at 100VAC and full load	
Over Voltage Protection		%	120% - 150% (See website for more details)	
Overload/Short Circuit		%	105-125%, constant current characteristic, 150% max short circuit current	
Remote ON/OFF Control		-	A TTL compatible signal will turn ON/OFF all output modules (optional)	
Remote Sense		V	Compensates for total of 0.75 volts total line drop (optional on dual output modules)	
Isolation	(4)	-	Input-Output 4.3kVDC <sup>(4)</sup> ; Input-Ground 2.3kVDC; Output-Ground 200VDC	
Conducted EMI		-	EN55022 Class B, (as per CISPR .22)	
Radiated EMI		-	EN55022 Class B, (as per CISPR .22)	
Operating Temperature		°C	0°C to 50°C, derate ea. output @ 2.5%/°C from 50°C to 65°C. Consult factory for 70°C operation. -20°C startup requires a 30 min. warm-up period.	
Cooling		-	Internal fan	
Dynamic Load Response		-	<6% or 300mV of set voltage for 50% load change (above 25% load), recovery to within 1% of nominal within 500 microseconds.	
Regulatory Agency Compliance		-	UL, CSA, EN, IEC 60950-1, EN61010-1, UL2601-1, EN, IEC6060-1, CE Mark for LVD	
Vibration		G	MIL-STD-810E, Method 514.4, Pro I, Cat 1, 9	
Shock		G	2G, 10-200Hz sweep for 1hr to search for resonant. 6G random, 6-Axis to IEC68-2-64	
Switching Frequency		kHz	MIL-STD-810F, Method 516.5, Pro I, IV, VI; 20G per IEC68-2-27	
Weight (Typ.)		lbs	200	
Size (L×W×H)		in(mm)	3.0 lbs. + 0.25 lbs. / used slot; maximum # of slots =5	
Warranty		-	10.6" x 5" x 2.5" (268.4mm x 127mm x 63.5mm)	
			3 Years	

Consult datasheet and application notes for detailed specifications and test methods.

- (1) 440Hz with reduced PFC, consult factory
- (2) Will operate with 130-330VDC

(3) See input derating curves

(4) 4kVAC type tested (non-production test). Refer to CB report

## Configuring Guide

Choose your options for boxes A through C. Select output voltage, single or dual output module code from the tables below, and options (if required) A maximum of 5 module slots may be used. List actual output voltages required to have them pre-set by the factory.

V   F  S    Choose the following power supply options.

**Primary Options**  
(Leave empty if not required)  
F AC Fail, Global/fan Inhibit, 5V/100mA standby  
E AC Fail, Global/fan Enable, 5V/100mA standby

**Input Filter Choice\***

	120VAC, 60Hz	240VAC, 60Hz	264VAC, 63Hz(5)
S	564µA	1270µA	1.5mA
L	109µA	246µA	290µA

**Output Power**

5	550W
7	750W

\* Max Leakage calculated at 264VAC, 63Hz. Note: Contact Lambda Technical Support for non-standard leakage options emissions compliance.  
(5) Type testing result

## Vega Output Modules

Module	V Range	Amp	Slots	Module	V Range	Amp	Slots
<b>Single Output</b>							
C1S	1.8-3.4V	35A	1	D4S	14-18V	18A	1.5
D1LS	1.8-3.4V	50A	1.5	E4S	14-19V	30A	2
E1S	1.8-3.4V	60A	2	C4S	16.3-18V	14A	1
L1S	4.2-5.1V	35A	1	C5S	21.6-30V	10A	1
D2S	3.8-7.5V	45A	1.5	D5S	21-28V	15A	1.5
D1HS	3.9-5.1V	50A	1.5	E5HS	24-28V	25A	2
E2S	3.8-7.5V	60A	2	HH5/4S	32.5-48V	4.5A	1
B2S	5-8V	25A	1	BB4S	32.6-40V	10A	2
C3S	9.1-15V	18A	1	C5B4S	43-48V	10A	2
D3S	8-15V	24A	1.5	DD5S	42-56V	15A	3
E3LS	8-12.5V	40A	2				

## Vega Output Modules

Module	V1 Min - V1 Max	V1 Amp	V2 Min - V2 Max	V2 Amp	Slots
<b>Dual Output</b>					
H1H/1LS	3.9V - 5.1V	12A	1.8V - 3.4V	8A	1
H1H/3S	3.9V - 5.1V	12A	9.1V - 15.5V	6A	1
H3/1HS	9.1V - 15.5V	10A	3.9V - 5.1V	8A	1
H3/3S	9.1V - 15.5V	10A	9.1V - 15.5V	6A	1
H5/1HS	16.2V - 28V	5A	3.9V - 5.1V	8A	1
H5/3S	16.2V - 28V	5A	9.1V - 15.5V	6A	1
H5/4S	16.2V - 28V	5A	16.3V - 24V	4.5A	1

Call 1-800-LAMBDA-4 for additional technical support or visit [us.tdk-lambda.com/lp/products/vega-series.htm](http://us.tdk-lambda.com/lp/products/vega-series.htm)

## Single Output Module Selection †

### Output Options

(Leave empty if not required)  
Inhibit, module good, and current share

N

Vout  Module  S  Opt.

Example  
12C3SN: 12V @ 18A single output module, with inhibit, module good, and current share option.

† Remote sense is standard on single output modules, optional on duals.

## Dual Output Module Selection

V1  / V2  Module  S  Opt.

### Output Options

Inhibit, module good, and remote sense

(Leave empty if not required)

Example  
12/12H3/3SN: 12V @ 10A and 12V @ 6A, dual output module with inhibit, module good, and remote sense option.

## Full Description Example:

V5FSSF 5L1SN 12/12H3/3S 24C5S

550W power supply with standard forward air fan, screw terminal input connections, 1.5mA leakage input filter, AC fail with Global/fan inhibit & 5V @ 100mA aux. supply option with the following outputs:

- 5V @ 35A With O/P inhibit, module good & current share options
- 12V @ 10A
- 12V @ 6A
- 24V @ 10A

Note the module descriptions are to be used as listed in the module tables.

## Derating Curve

