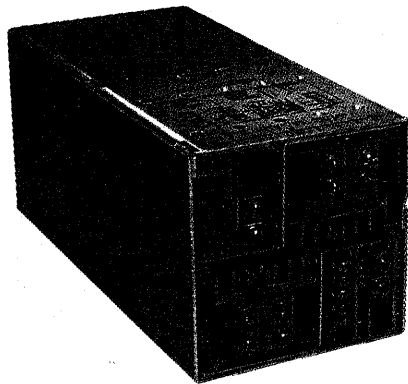


## UltraFlex Series



### Customized Power Supplies

**Capable of up to 20 Fully Regulated & Independent Outputs.**

**Universal AC Input or 48VDC Input**

**Full Array of Signals & Controls**

**International Safety Agency Approvals**

**Conducted EMI B**

**Compact Packages**

**Input Transient Protection**

There's no need to panic just because you need a power supply that doesn't seem to be available from stock. Lambda's UltraFlex is able to provide a custom 400W-2500W solution tailored to your power needs. With their compact design, these power supplies offer state-of-the-art power density with up to 20 fully regulated independent outputs.

The UltraFlex Series also offers an impressive array of signals and controls for ease of system integration, plus a wide range of output voltages to power numerous applications within industrial, telecom and computer systems.

#### Similar products

<b>Alpha</b>	Low-Cost Modular
<b>Sirius</b>	Low-Power Modular

#### Page

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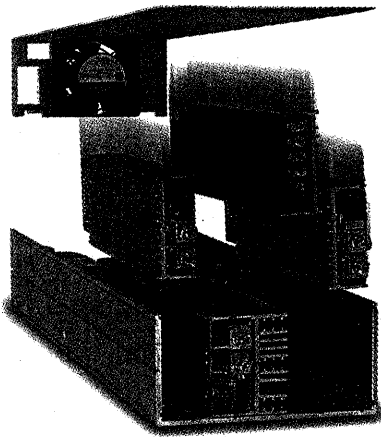
## UltraFlex Series

<b>AC Input</b> .....	85VAC–265VAC, 47Hz–63Hz (Cases UA, UB, UM, UN and UE). 170VAC–265VAC, 47Hz–63Hz (Case UG).
<b>DC Input</b> .....	36VDC–75VDC on Case UC.
<b>Efficiency</b> .....	75% typical at nominal line voltage.
<b>Power Factor Correction</b> ....	Compliant to EN61000-3-2, power factor is 0.99 typical at full load, 230VAC.
<b>Inrush Current Limiting</b> .....	Less than 40A peak from a cold start at 25°C ambient.
<b>EMI</b> .....	Conducted EMI conforms to: EN55022 Level B & FCC Class B (Cases UA, UB, UC). EN55022 Level A (Cases UM & UN). EN55022 Level B and FCC Class A (Cases UE & UG).
<b>Output Voltage Adj Range</b> ..	Refer to the output module table.
<b>Line Regulation</b> .....	Less than 0.1% for line variations from 85VAC–265VAC. Less than 0.2% for dual output modules.
<b>Load Regulation</b> .....	Less than 0.4% for load variations from no load to full load and full load to no load. Less than 0.8% for dual output modules.
<b>Cross Regulation</b> .....	Less than 0.1% between single output modules. Less than 3% between dual outputs with 25% load change on high current output.
<b>Ripple and Noise</b> .....	For outputs 12V or less, 50mV pk-pk or 15mV RMS. For outputs greater than 12V, 1% pk-pk or 0.33% V RMS. For dual outputs, 1% pk-pk or 0.33% V RMS 20mHz bandwidth.
<b>Preload</b> .....	External preload is not required on any single output modules. Dual output modules require a 1A minimum load on the highest current output (output #1).
<b>Hold-up Time</b> .....	20msec at full load with nominal 115/230VAC input (Cases UA, UB, UM, UN & UC). 16msec at full load with 230VAC (Cases UE & UG).
<b>Overvoltage Protection</b> ....	Internal circuitry will shut down the individual output module. Reset the OVP by recycling the input power.
<b>Overload Protection</b> .....	Overcurrent protection on single output modules limits the current. Upon removal of the overload condition, normal operation resumes automatically.
<b>Cooling</b> .....	Cooling is provided via an internal DC operated ball-bearing fan(s).
<b>Operating Temperature Range</b>	Full operation from 0°C to +50°C with 100% rated power on most models. Derate linearly from +50°C to 50% power at +65°C.
<b>Storage Temperature</b> .....	-40°C to +85°C.
<b>Temperature Coefficient</b> ....	0.02%/°C.
<b>Isolation</b> .....	Conforms to safety agency requirements.
<b>Vibration and Shock</b> .....	Shock: IEC68-2-27 (Case UE & UG). Vibration: IEC68-2-64, 20-20kHz, 30 min., 6 Grms (Case UE & UG).
<b>Remote Sensing</b> .....	Remote sense compensates for total cable drop of up to 0.5VDC. Available on most outputs. Refer to the module table.
<b>Thermal Protection</b> .....	The power supply will shut down in the event of an overtemperature condition (the fan will continue to operate). To restore operation, the supply must cool down and the AC input must be recycled.
<b>Mounting</b> .....	A minimum of two mounting surfaces on all models.
<b>Military Specifications</b> .....	Shock: MIL-STD-810E, Method 516.4, Procedure 1. (Cases UA, UB, UC, UM & UN) Vibration: MIL-STD-810E, Method 514.4, Category I, TP1. (Cases UA, UB, UC, UM & UN).
<b>Safety Agency</b> .....	UL 1950, CSA 22.2 No. 220, EN 60950, CE Mark (Low Voltage Directive).
<b>Warranty</b> .....	3 years.



# UltraFlex Series Model Number Configurator

## UltraFlex Series



### Part Number Format

UBJ1

GGJJP

### Code Codes

Depending on your input voltage, power needs, and features choose from the following converters:

Code	Power	Input	Slots	EMI (Conducted)	Dimensions (H x W x L)	Note
UAJ1	400W	85-265 VAC	5	Class B	2.5" x 5" x 10"	
UAZ1	400W	85-265 VAC	5	Class B	2.5" x 5" x 10"	Full Featured
UBJ1	600W	85-265 VAC	5	Class B	2.5" x 5" x 11"	
UBZ1	600W	85-265 VAC	5	Class B	2.5" x 5" x 11"	Full Featured
UCJ4	600W	36-75 VDC	5	Class B	2.5" x 5" x 12"	
UCZ4	600W	36-75 VDC	5	Class B	2.5" x 5" x 12"	Full Featured
UMZ2	400W	85-265 VAC	5	Class A	2.5" x 5" x 10"	UL2601 Approved
UNZ2	600W	85-265 VAC	5	Class A	2.5" x 5" x 11"	UL2601 Approved
UEZ1	1500W	85-265 VAC	10	Class B	5" x 5.125" x 11"	Full Featured
UGZ1	2500W	170-264 VAC	14	Class B	5" x 8" x 11"	Full Featured

Notes: 1) J = NO OPTIONAL SIGNALS: The standard DC output module has remote sense, overcurrent and overvoltage protection.

Z = INPUT SIGNAL (Global): Input power fail, 5V standby, global inhibit, global output good, fan stop/thermal alarm, fan inhibit.

OUTPUT MODULE SIGNALS: Module inhibit, margin, remote adjust, output good, current monitor & current share: active current share & module inverter OK.

2) Some output modules are NOT available with Z version features. Please refer to Table 2 for further details.

3) The UEZ1 has two rows of 5 slots. The UGZ1 has a top row of 8 slots and a bottom row of 6 slots.

4) The UEZ1 power rating 1000W @ 85VAC, 1200W @ 100VAC, 1500W @ 170VAC

### Sample Configurations

	Output 1		Output 2		Output 3		Output 4		Output 5	
	V	A	V	A	V	A	V	A	V	A
UAJ1-T	48	8	-	-	-	-	-	-	-	-
UAZ1-D-H	3.3	30	5	60	-	-	-	-	-	-
UBZ1-G-J-J	5	30	12	17	12	17	-	-	-	-
UMZ2-H-Y	5	60	12	10	12	4	-	-	-	-
UBJ1-H-J-J-P-5	55	12	17	12	17	24	8.5	-	-	-
UAJ1-5C-7H-G	2.5	15	5	15	5	30	-	-	-	-
UCZ4-H-K-W-5	55	12	30	5	8	12	3	-	-	-
UBZ1-H-W-Y-5	55	5	8	12	3	12	8	12	3	-
UBJ1-G-G-J-J-P	5	30	5	30	12	17	12	17	24	8.5
UEZ1-7K-9H-E-G-J	12	6.25	5	200	3.3	30	5	30	12	17

Note: The module listing within the part number does not reflect the actual position of the module.

## UltraFlex Series

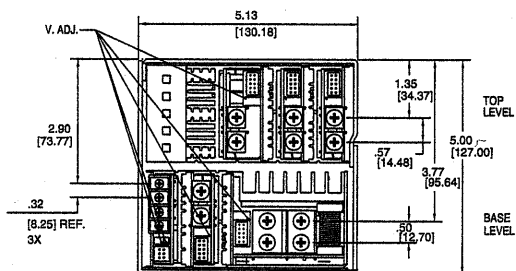
## 2 Output Module Code Selector

From the table below, match the available modules to your voltage and current requirements. Modules are available in different power levels which correspond to varying slot widths. Refer to the case code table for the maximum total of slots available for each converter.

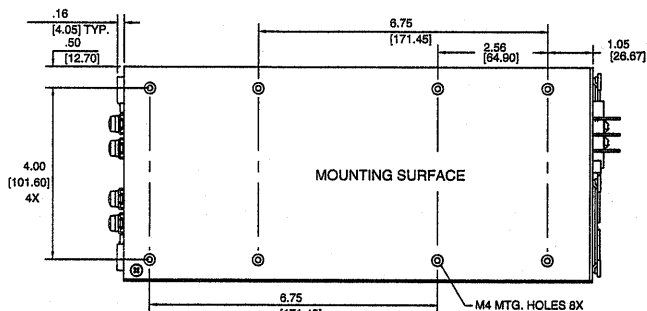
	Code	V1 nom	Amps <sup>2</sup>	V2 nom	Amps <sup>2</sup>	V1 adjust <sup>4</sup>	V2 adjust <sup>4</sup>	Slot(s)
Single Outputs <sup>2</sup> (Low-Cost)	7B	2.0	15	-	-	1.8 - 2.2	-	1
	5C†	2.5	15	-	-	2.2 - 3.0	-	1
	7E	3.3	15	-	-	3.0 - 3.6	-	1
	7H	5.0	15	-	-	4.5 - 6.0	-	1
	5H†	10.0	8	-	-	7.0 - 11.0	-	1
	7K	12.0	8	-	-	10.8 - 13.2	-	1
	7N	15.0	6	-	-	13.5 - 16.5	-	1
	7Q	24.0	4	-	-	21.6 - 26.4	-	1
	7T	48.0	2	-	-	43.2 - 52.8	-	1
Single Outputs	A	2.0	30.0	-	-	1.8 - 2.2	-	1
	B	2.0	60.0	-	-	1.8 - 2.2	-	2
	C	2.0	100.0	-	-	1.8 - 2.2	-	3
	5C†	2.5	30.0	-	-	2.2 - 3.0	-	1
	5C†	2.5	60.0	-	-	2.2 - 3.0	-	2
	5F†	2.5	100.0	-	-	2.2 - 3.0	-	3
	5G†	2.5	200.0	-	-	2.2 - 3.0	-	5
	D	3.3	30.0	-	-	3.0 - 3.6	-	1
	E	3.3	60.0	-	-	3.0 - 3.6	-	2
	F	3.3	100.0	-	-	3.0 - 3.6	-	3
	9E†	3.3	200.0	-	-	3.0 - 3.6	-	5
	G	5.0	30.0	-	-	4.5 - 6.0	-	1
	H	5.0	60.0 <sup>3</sup>	-	-	4.5 - 6.0	-	2
	I	5.0	100.0	-	-	4.5 - 6.0	-	3
	9H	5.0	200.0	-	-	4.5 - 6.0	-	5
	5J†	10.0	17.0	-	-	7.0 - 11.0	-	1
	J	12.0	17.0	-	-	10.8 - 13.2	-	1
	K	12.0	30.0	-	-	10.8 - 13.2	-	2
	L	12.0	50.0	-	-	10.8 - 13.2	-	3
	M	15.0	14.0	-	-	13.5 - 16.5	-	1
	N	15.0	24.0	-	-	13.5 - 16.5	-	2
	5P†	20.0	8.5	-	-	16.5 - 22.0	-	1
	5Q	20.0	15.0	-	-	16.5 - 22.0	-	2
	P	24.0	8.5	-	-	21.6 - 26.4	-	1
	Q	24.0	15.0	-	-	21.6 - 26.4	-	2
	R	24.0	25.0	-	-	21.6 - 26.4	-	3
	9Q†	24.0	41.7	-	-	21.6 - 26.4	-	5
	8	28.0	12.0	-	-	25.2 - 30.8	-	2
	3	36.0	11.0	-	-	32.4 - 39.6	-	2
	S	48.0	4.0	-	-	43.2 - 52.8	-	1
	T	48.0	8.0	-	-	43.2 - 52.8	-	2
	U	48.0	12.5	-	-	43.2 - 52.8	-	3
Dual Outputs <sup>4</sup>	V	5	4 <sup>3</sup>	12	10 <sup>3</sup>	4.5 - 5.5	10.8 - 13.2	1
	W	5	10 <sup>3</sup>	12	4	4.5 - 5.5	10.8 - 13.2	1
	Y	12	10 <sup>3</sup>	12	4 <sup>3</sup>	10.8 - 13.2	10.8 - 13.2	1
	Z	15	10	15	4	13.5 - 16.5	13.5 - 16.5	1

- Notes: 1) Module codes are ordered numerically then alphabetically (i.e. UBZ1-3-8-G or UBZ1-5I-7H-G-S). The module listing within the part number does not reflect the actual position of the module.
- 2) Low-cost 75W modules only feature remote sense on 5V and less.
- 3) Module deratings when using 600W converters (UB, UC, & UN).  
H derates to 55A  
V, W & Y: 10A derates to 8A & 4A derates to 3A.  
Peak currents for 1 minute without derating.
- 4) Dual output modules do not have output or input signals except for remote sense & inhibit only.  
†These modules are coming soon.

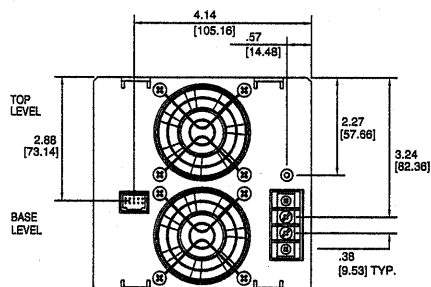
## UltraFlex Series



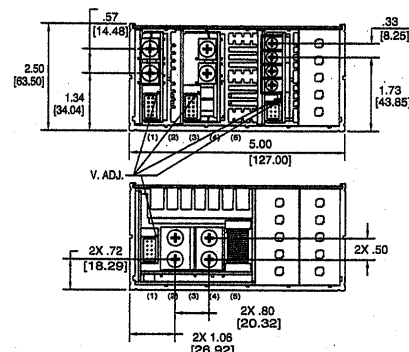
FRONT VIEW (1500W)



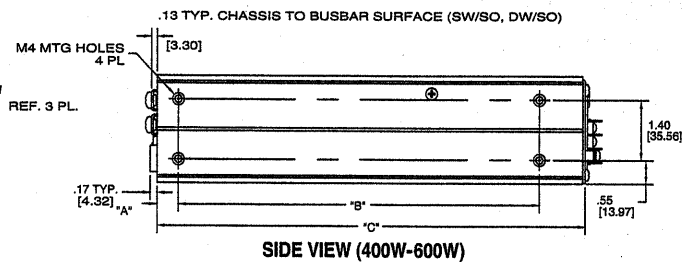
SIDE VIEW (1500W)



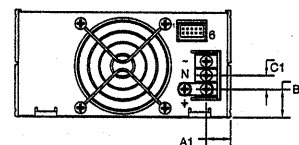
BACK VIEW (1500W)



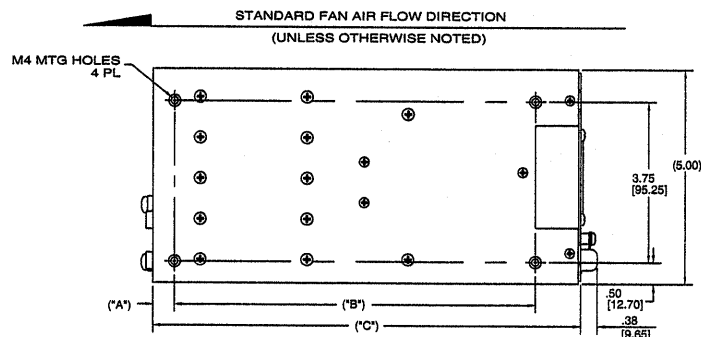
FRONT VIEW (400W-600W)



SIDE VIEW (400W-600W)



DESCRIPTION	A1	B1	C1
AC INPUT	.57 [14.47]	.66 [16.76]	.325 [8.28] TYP.
DC INPUT	.55 [13.97]	.60 [15.24]	.375 [9.53] TYP.

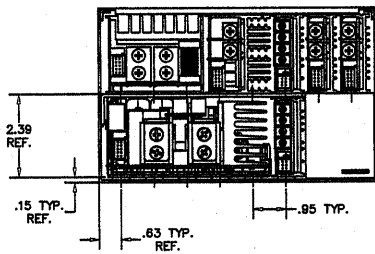


BOTTOM VIEW (400, 600, & 1500W)

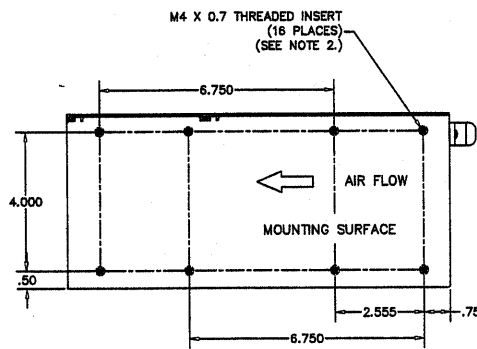
DESCRIPTION	DIM "A"	DIM "B"	DIM "C"
400W	.50 [12.7]	8.40 [213.36]	9.96 [252.96]
600W	.50 [12.7]	9.63 [244.60]	10.96 [278.38]
(DC INPUT) 600W	.50 [12.7]	9.63 [244.60]	11.90 [302.28]
1500W	.50 [12.7]	9.63 [244.60]	10.96 [278.38]

in. [mm]

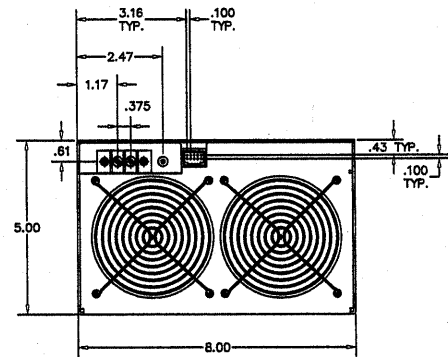
## UltraFlex Series



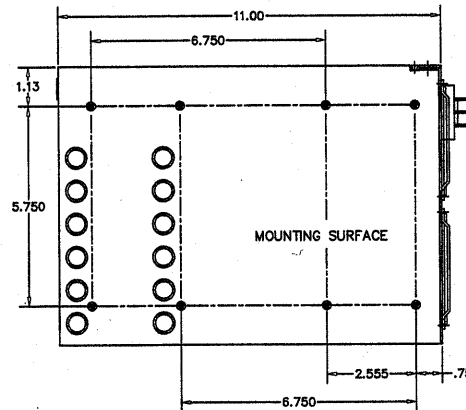
REAR VIEW (2500W)



SIDE VIEW (2500W)



FRONT VIEW (2500W)



BOTTOM VIEW (2500W)

2500W

### NOTES:

1. CUSTOMER MUST PROVIDE ADEQUATE CLEARANCE AT FRONT AND REAR SURFACES FOR AIR FLOW.
2. CUSTOMER MOUNTING SCREWS (M4 X 0.7) MUST NOT PROTRUDE INTO THE POWER SUPPLY BY MORE THAN .25 (6.3).
3. DIMENSIONS ARE IN INCHES.
4. POSITION OF THE FANS AND CONNECTORS SUBJECT TO CHANGE WITHOUT NOTICE.