

# **Low Profile**

**SWITCHING REGULATED** (to 720 watts)

(Power Factor Correction and Universal Input)

single output & wide adjust output



# Don't forget these facts about Acopian....

- 1. We ship within 3 Days (see our 3 Day Shipping Promise below).
- 2. Acopian power supplies last a *very long time*.
- 3. The Voltage Finder is the quickest way to find a power supply with the specs you need.
- 4. The Online System builder (www.acopian.com/SystemBuilder) is a convenient way to get your own custom Power System (and they ship within 9 Days).
- 5. You always talk to a real person when you call Acopian.
- 6. You can order your Acopian power supplies factory direct.
- 7. You can order your Acopian power supplies online.
- 8. All Acopian products are made in the USA.



Acopian Technical Company • Easton, PA
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Order Factory Direct
Made in USA





#### **Low Profile**

SWITCHING REGULATED (to 720 watts)
(Power Factor Correction and Universal Input)

AC-DC or DC-DC single output & wide adjust output

- Shipped Within 6 Days
- All models UL Recognized
- UL508 Listed Units Available
- All models CE Certified
- Five Year Warranty

#### STANDARD FEATURES

- Universal input
- Power Factor Correction
- Constant voltage and constant current modes
- Voltage and current monitor terminals
- · Voltage and current programming capabilities
- Short circuit and overload protection
- Thermal protection
- Low Profile
- No minimum load required
- Adjustable down to 0 volts ('Wide Adjust' models)
- Can be paralleled for increased current (option P)
- N+1 Redundancy (option N)
- · Internal EMI Filter and RFI Shielding
- · Pluggable connectors for input and control wiring
- Remote Sensing
- · 'Vout OK' signal monitor
- · 'Soft start' operation

#### **SPECIFICATIONS**

Input Voltage: 90-265 VAC, 49-420 Hz, single phase, or 110-350 Vdc. 208 VAC 3-phase is also available (see Options). AC input (maximum): 8A (WL7 case), 12A (WL9 case) DC input (maximum): 5.75A (WL7 case), 8.8A (WL9 case) DC input may be connected without regard to polarity.

Inrush current: Cold start, (thermistor limiter) 33A peak @ 115 VAC (typical); 65A peak @ 230 VAC (typical).

Startup Time: 800 mS (typical).

**Input Undervoltage:** An input of less than 90 VAC will not damage power supply.

**Power Factor:** 0.99 typical at 115 VAC, 60Hz and full load. Complies with EN61000-3-2.

#### Regulation (in constant voltage mode):

Line Regulation: ±0.05% or 5 mV, whichever is greater. Load Regulation: ±0.05% or 5 mV, whichever is greater.

## Regulation, Ripple (in constant current mode):

Line Regulation: ±0.2% or 30 mA. Load Regulation: ±0.5% or 100 mA.

Current Ripple: 0.5% rms.

Ambient Operating Temperature: 0 to +71°C.

Temperature Coefficient (after 30 minute warm-up):

Voltage mode; ±0.02%/°C (typical). Current mode; ±0.1%/°C (typical).

**Drift (voltage mode or current mode):** ±0.1% (typical)

over 8 hours, after 30 minute warmup.

Storage Temperature: -40 to +85°C.

Holdup Time: 20 mS minimum with full load.

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**Transient Response:** 300  $\mu$ S to return to  $\pm 1\%$  of output setting. Maximum of  $\pm 3\%$  output excursion following a load step change from 50% to 100%.

**Efficiency:** See table. (Typical, at 115 VAC, with full load.)

**Polarity:** Output is floating and may be used in either polarity.

**Remote Sensing:** Compensates up to 0.5 Vdc drop per output line (or within the limits of the output voltage adjustment range). (Wide Adjust models compensate up to 0.5 Vdc drop per output line.

**Output Adjustment:** Voltage and current output adjustments are located on the front. Output adjustment may also be controlled by using remotely located potentiometers.

Output Programming (Wide Adjust models): The output voltage and current may be programmed from 0 to full rating by means of control voltage inputs of 0 to +10Vdc (0 to +5Vdc for models with option "C5"). Voltage mode accuracy: 0.5%. Current mode accuracy: 3% for models with greater than 10 amps output current and 4% for models with less than 10 amps output current. Accuracy percentages do not apply below 5% of output rating.

**Voltage Monitor Terminal:** Permits remote monitoring of output voltage, stepped down by a ratio of 10:1 (for 3.3v to 90v models) or 100:1 (for 100v to 135v models). Accuracy is 0.5% of maximum rated output voltage.

For models with 0-5v programming option "C5": Permits remote monitoring of output voltage, stepped down by a ratio of 10:1 (for 3.3v to 45v models) or 100:1 (for 48v to 135v models). Accuracy is 0.5% of maximum rated output voltage.

Current Monitor Terminal: For models with greater than 10 amps output current: permits remote monitoring of output current, stepped down by a ratio of 100 mV/Amp (accuracy is 3% of maximum rated output current). For models with less than 10 amps output current: permits remote monitoring of output current, stepped down by a ratio of 1000 mV/Amp (accuracy is 3% of maximum rated output current).

For models with 0-5v programming option "C5": For models with greater than 45 amps output current: permits remote monitoring of output current, stepped down by a ratio of 10 mV/Amp (accuracy is 5% of maximum rated output current). For models with less than 45 amps output current: permits remote monitoring of output current, stepped down by a ratio 100 mV/Amp

(accuracy is 3% of maximum rated output current).



**Overload/Short Circuit Protection:** A short or overload forces the power supply into constant current mode, with automatic recovery.

**Overvoltage Protection:** Latches power supply OFF, reset by momentarily removing AC input power. (Models with 'N' option reset automatically.)

Thermal Protection: Thermostat(s), self-resetting. Internal Failure Protection: Provided by internal fuse.

**Output Inhibit:** Applying between +3 and +15 Vdc to the Inhibit terminal will disable the supply. 'Output Enable' is also available (see Options).

**Vout OK:** When the power supply's output voltage is between -10% and +15% of the nominal output voltage, 'Vout OK' will be between +3 and +5Vdc (high). When the output voltage is outside the -10%, +15% window, the 'Vout OK' voltage will go low (approx 0.5 Vdc). 'Vout OK' can source 1 mA or sink up to 5 mA. (Not available on Wide Adjust Output models.)

Output Indicator (DC on): Green LED. Switching Frequency: 110 kHz (typical).

EMI: Designed to meet FCC Part 15 and EN55022, Class A.

Dielectric Withstand VoltageIsolationInput to output:4242 Vdc300 VdcInput to case:2121 Vdc300 VdcOutput to case:750 Vdc300 Vdc

**Cooling:** Forced-air cooled; air enters rear of power supply and exits from front cover.

**Mounting:** Threaded mounting holes permit mounting to a chassis, cabinet wall or bracket. To mount from the power supply side of the mounting surface use Mounting Kit NP6, or for DIN rail mounting use Mounting Kit WL35DIN or WLH35DIN. See accessory Mounting Kits on page 91.

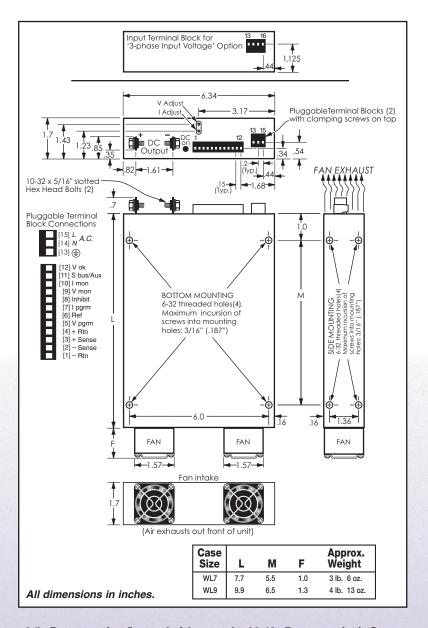
#### **OPTIONS**

**Output Enable:** To enable the DC output, the Inhibit terminal must be tied to the -DC output. An open collector or contact closure can be used. To order, add suffix "E" to the model number. No increase in price.

N+1 Redundancy: Allows up to 4 like models to be wired in N+1 redundancy. An internal isolation OR-ing diode is included in each power supply. Current share accuracy is ±5% (typical). Power supply output current must be derated by 10%. (Available on Single Output models only.) This option includes the "P" (Parallelable) option and the "E1" (Output Blocking Protection Diode) option listed below, so if you specify the "N" option do not also specify the "P" or "E1" options. To order, add suffix "N" to the model number, and increase standard price by \$50.00.

**Parallelable:** Allows up to 4 like models to be directly wired in parallel for increased current capability. Current share accuracy is ±5% (typical). Power supply output current must be derated by 5%. (Available on Single Output models only.) This option is included in the "N" (**N+1 Redundancy**) option listed above, so if you specify the "N" option, do not also specify the "P" option. To order, add suffix "P" to the model number, and increase standard price by \$25.00.

Output Blocking Protection Diode: Used for battery charging or redundant applications. Derate output by 10%. This option is included in the "N" (N+1 Redundancy) option listed above, so if you specify the "N" option, do not also specify the "E1" option. To order, add suffix "E1" to the model number, and increase standard price by \$25.00.



**0-5v Programming (instead of the standard 0-10v Programming):** Output voltage and current of standard models may be programmed from 0 to full rating by means of control voltage inputs of 0 to +10Vdc. For programming with 0 to +5Vdc control voltages, add suffix "C5" to the model number, and increase standard price by \$40.00. Voltage mode accuracy: 1%. Current mode accuracy: 5%. Accuracy percentages do not apply below 5% of output rating. (Available on Wide Adjust Output models only.)

**Thermostatically Controlled Fan:** Fan runs at reduced speed until maximum speed is required. To order, add suffix "D2" to the model number, and increase standard price by \$30.00.

**208 VAC 3-phase Input Voltage:** 170-240 VAC, 60-400 Hz. To order, add suffix "L4" to the model number, and increase standard price by \$115.00.

**15Vdc Auxiliary Voltage:** +15Vdc ±2% at 100mA. This option is not available with options "N" or "P". To order, add suffix "H5" to the model number, and increase standard price by \$15.00.

**UL508 Listed:** These power supplies have been tested for compliance with the electrical requirements of UL508, and can be marked in compliance to UL508 at no additional cost. To order, add suffix "U" to model number.

# **Low Profile SWITCHING REGULATED (to 720 watts)**

# **SINGLE OUTPUT**

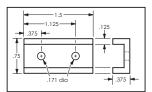
			_						
Nominal Output	Adjust Range		Current os. at			Effic. (Typ.)	(\$)		Case
Voltage	± V	40°C	71°C	RMS	P-P	`%	Price	Model	Size
3.3	.25	40	30	15	50	61	590	W3.3LT4000	WL7
3.3	.25	70	49	15	50	61	775	W3.3LT7000	WL9
5	.25	40	30	15	50	64	590	W5LT4000	WL7
5	.25	70	49	15	50	64	775	W5LT7000	WL9
6	.25	40	30	15	50	65	590	W6LT4000	WL7
6	.25	68	47.6	15	50	65	775	W6LT6800	WL9
7	.5	40	29	15	50	65	590	W7LT4000	WL7
7	.5	66	46.2	15	50	65	775	W7LT6600	WL9
8	.5	39	28	30	100	67	590	W8LT3900	WL7
8	.5	64	44.8	30	100	67	775	W8LT6400	WL9
9	.5	38.8	27.2	30	100	67	590	W9LT3880	WL7
9	.5	62	43.4	30	100	67	775	W9LT6200	WL9
10	.5	37.5	26.3	30	100	68	590	W10LT3750	WL7
10	.5	60	42	30	100	68	775	W10LT6000	WL9
12	1	37.5	26.3	30	100	73	590	W12LT3750	WL7
12	1	60	42	30	100	73	775	W12LT6000	WL9
13	1	34.6	24.2	30	100	73	590	W13LT3460	WL7
13	1	55.4	38.8	30	100	73	775	W13LT5540	WL9
14	1	32.1	22.5	30	100	73	590	W14LT3210	WL7
14	1	51.4	35.9	30	100	73	775	W14LT5140	WL9
15	1	30	21	30	100	73	590	W15LT3000	WL7
15	1	48	33.6	30	100	73	775	W15LT4800	WL9
16	1	28.1	19.7	30	100	73	590	W16LT2810	WL7
16	1	45	31.5	30	100	73	775	W16LT4500	WL9
18	1	25	17.5	30	100	75	590	W18LT2500	WL7
18	1	40	28	30	100	75	775	W18LT4000	WL9
20	1	22.5	15.8	30	100	76	590	W20LT2250	WL7
20	1	36	25.2	30	100	76	775	W20LT3600	WL9
22	1	20.5	14.4	30	100	76	590	W22LT2050	WL7
22	1	32.7	22.9	30	100	76	775	W22LT3270	WL9
24	1	18.8	13.2	30	100	78	590	W24LT1880	WL7
24	1	30	21	30	100	78	775	W24LT3000	WL9
25	1	18	12.6	30	100	78	590	W25LT1800	WL7
25	1	28.8	20.2	30	100	78	775	W25LT2880	WL9
26	1	17.3	12.1	30	100	78	590	W26LT1730	WL7
26	1	27.7	19.4	30	100	78	775	W26LT2770	WL9
28	1	16	11.2	30	100	78	590	W28LT1600	WL7
28	1	25.7	18	30	100	78	775	W28LT2570	WL9
30	1	15	10.5	45	150	78	590	W30LT1500	WL7
30	1	24	16.8	45	150	78	775	W30LT2400	WL9

	Nominal Output	Adjust Range	Ámp	Current os. at	(@ 25 MHz BW)		Effic. (Typ.) (\$)			Case
1	Voltage	±V	40°C	71°C	RMS	P-P	%	Price	Model	Size
1	32	1	14	9.8	45	150	78	590	W32LT1400	WL7
1	32	1	22.5	15.8	45	150	78	775	W32LT2250	WL9
1	34	1	13.2	9.3	45	150	78	590	W34LT1320	WL7
1	34	1	21.2	14.8	45	150	78	775	W34LT2120	WL9
1	36	1	12.5	8.8	45	150	78	590	W36LT1250	WL7
1	36	1	20	14	45	150	78	775	W36LT2000	WL9
1	38	1	11.8	8.3	45	150	78	590	W38LT1180	WL7
1	38	1	18.9	13.2	45	150	78	775	W38LT1890	WL9
1	40	1	11.3	7.9	45	150	79	590	W40LT1130	WL7
1	40	1	18	12.6	45	150	79	775	W40LT1800	WL9
1	42	1	10.7	7.5	45	150	79	590	W42LT1070	WL7
1	42	1	17.1	12	45	150	79	775	W42LT1710	WL9
1	45	1	10	7	45	150	79	590	W45LT1000	WL7
1	45	1	16	11.2	45	150	79	775	W45LT1600	WL9
1	48	1	9.4	6.6	45	150	79	590	W48LT940	WL7
	48	1	15	10.5	45	150	79	775	W48LT1500	WL9
	50	1	9	6.3	44	150	79	590	W50LT900	WL7
1	50	1	14.4	10	44	150	79	775	W50LT1440	WL9
1	55	1	8.2	5.7	44	150	79	590	W55LT820	WL7
1	55	1	13.1	9.2	44	150	79	775	W55LT1310	WL9
	60	1	7.5	5.3	44	150	79	590	W60LT750	WL7
	60	1	12	8.4	44	150	79	775	W60LT1200	WL9
	70	1	6.4	4.5	66	225	79	590	W70LT640	WL7
	70	1	10.3	7.2	66	225	79	775	W70LT1030	WL9
	75	1	6	4.2	66	225	79	590	W75LT600	WL7
	75	1	9.6	6.7	66	225	79	775	W75LT960	WL9
	80	1	5.6	3.9	66	225	79	590	W80LT560	WL7
	80	1	9	6.3	66	225	79	775	W80LT900	WL9
	90	1	5	3.5	66	225	79	590	W90LT500	WL7
	90	1	8	5.6	66	225	79	775	W90LT800	WL9
	100	1	4.5	3.2	88	300	79	590	W100LT450	WL7
	100	1	7.2	5	88	300	79	775	W100LT720	WL9
	110	1	4.1	2.9	88	300	79	590	W110LT410	WL7
	110	1	6.5	4.5	88	300	79	775	W110LT650	WL9
	120	1	3.8	2.7	88	300	79	590	W120LT380	WL7
	120	1	6	4.2	88	300	79	775	W120LT600	WL9
	125	1	3.6	2.5	88	300	79	590	W125LT360	WL7
	125	1	5.7	4	88	300	79	775	W125LT570	WL9
	135	1	3.3	2.3	103	350	79	590	W135LT330	WL7
	135	1	5.3	3.7	103	350	79	775	W135LT530	WL9

# **Low Profile SWITCHING REGULATED (to 720 watts)**

# **WIDE ADJUST OUTPUT**

Output	Output	Current	Ripple mV		Effic.			
Voltage	Amp	os. at	(@ 25 MHz BW)		(Typ.)	(\$)		Case
Range	40°C	71°C	RMS	P-P	%*	Price	Model	Size
0-5	40	31	15	50	64	615	Y05LX4000	WL7
0-5	70	49	15	50	64	800	Y05LX7000	WL9
0-8	40	28	30	100	67	615	Y08LX4000	WL7
0-8	64	44	30	100	67	800	Y08LX6400	WL9
0-9	38	27	30	100	67	615	Y09LX3800	WL7
0-9	62	43	30	100	67	800	Y09LX6200	WL9
0-10	37	26	30	100	68	615	Y010LX3700	WL7
0-10	60	42	30	100	68	800	Y010LX6000	WL9
0-12	37	26	30	100	68	615	Y012LX3700	WL7
0-12	60	42	30	100	68	800	Y012LX6000	WL9
0-14	32	22	30	100	70	615	Y014LX3200	WL7
0-14	51	35	30	100	70	800	Y014LX5100	WL9
0-15	30	21	30	100	70	615	Y015LX3000	WL7
0-15	48	34	30	100	70	800	Y015LX4800	WL9
0-16	28	20	30	100	70	615	Y016LX2800	WL7
0-16	45	31	30	100	70	800	Y016LX4500	WL9
0-18	25	18	30	100	71	615	Y018LX2500	WL7
0-18	40	28	30	100	71	800	Y018LX4000	WL9
0-22	20	14	30	100	73	615	Y022LX2000	WL7
0-22	32	22	30	100	73	800	Y022LX3200	WL9
0-24	18	13	30	100	73	615	Y024LX1800	WL7
0-24	30	21	30	100	73	800	Y024LX3000	WL9
0-25	18	13	30	100	73	615	Y025LX1800	WL7
0-25	28.8	20	30	100	73	800	Y025LX2880	WL9
0-30	15	11	45	150	75	615	Y030LX1500	WL7
0-30	24	16	45	150	75	800	Y030LX2400	WL9
0-35	12.8	9	45	150	75	615	Y035LX1280	WL7
0-35	20.5	14	45	150	75	800	Y035LX2050	WL9
0-36	12	8	45	150	75	615	Y036LX1200	WL7
0-36	20	14	45	150	75	800	Y036LX2000	WL9
0-40	11	8	45	150	76	615	Y040LX1100	WL7
0-40	18	12	45	150	76	800	Y040LX1800	WL9
0-50	9	6	45	150	76	615	Y050LX900	WL7
0-50	15	10	45	150	76	800	Y050LX1500	WL9
0-60	7.5	5.3	45	150	79	615	Y060LX750	WL7
0-60	12	8.4	45	150	79	800	Y060LX1200	WL9
0-70	6.4	4.5	66	225	79	615	Y070LX640	WL7
0-70	10.3	7.2	66	225	79	800	Y070LX1030	WL9
0-75	6	4.2	66	225	79	615	Y075LX600	WL7
0-75	9.6	6.7	66	225	79	800	Y075LX960	WL9
0-80	5.6	3.9	66	225	79	615	Y080LX560	WL7
0-80	9	6.3	66	225	79	800	Y080LX900	WL9
0-90	5	3.5	66	225	79	615	Y090LX500	WL7
0-90	8	5.6	66	225	79	800	Y090LX800	WL9
0-100	4.5	3.2	88	300	79	615	Y0100LX450	WL7
0-100	7.2	5	88	300	79	800	Y0100LX720	WL9
0-110	4.1	2.9	88	300	79	615	Y0110LX410	WL7
0-110	6.5	4.5	88	300	79	800	Y0110LX650	WL9
0-120	3.8	2.7	88	300	79	615	Y0120LX380	WL7
0-120	6	4.2	88	300	79	800	Y0120LX600	WL9
0-125	3.6	2.5	88	300	79	615	Y0125LX360	WL7
0-125	5.7	4	88	300	79	800	Y0125LX570	WL9
0-135	3.3	2.3	103	350	79	615	Y0135LX330	WL7
0-135	5.3	3.7	103	350	79	800	Y0135LX530	WL9



# **WALL MOUNTING KITS ...\$10**

These kits provide a way of mounting power supplies on a wall or panel when the other side of the mounting surface is inaccessible. Each kit consists of four aluminum brackets and four machine screws for fastening them to the power supply, effectively adding mounting flanges to the power supply.

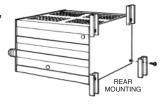


## For Gold Box and modular High Voltage power supplies:

GB8 Mounting Kit (#8-32 mounting holes)

Can be used on these case sizes:

CM6, CM9, CM13, CH11, CH16, DG5, DG6, DG9, G3, G5, G5D, G6, G9, G13, GT5, GT6, GT9, GT13, H8, H11, H16, HD345, HD355, HA349, HA359, HT11, HT16, M6, M9, M13, RM6, RW6 TG5, TG6, TG9, TG13, TH11, WG7, WM6, WM9, Y3, Y5, Y6, YH11, YA



# For Narrow Profile power supplies:

NP6 Mounting Kit (#6-32 mounting holes)

Can be used on these case sizes:

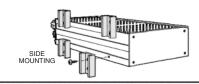
AMC, CN8T, DN6B, DN6A, DN8A, DN8, F6T, F8T, N8T, WL9, WN6A, WN6B, WN8, WN8A, TN6T

## NP6L Mounting Kit (#6-32 mounting holes)

Model NP6L consists of two brackets 1.5" long as shown above. and two 2.5" long brackets (to extend beyond heat sink).

Can be used on these case sizes:

CN8H, N8H, TN8H



# **DIN RAIL MOUNTING KITS ...\$15**

NPH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes:

CN8H DN6A F6T N8H TN6T

CN8T DN6B F8T DN8

DN8A

H8NT N8T

WN6A WN6B WN8 WN8A

WN8A

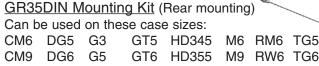


Can be used on these case sizes:

CN8H DN6A F6T N8H WN6A TN6T CN8T DN6B F8T N8T TN8H WN6B 8NW

DN8 DN8A

WL35DIN Mounting Kit (Vertical mounting) Can be used on these case sizes: WL7, WL9



GT6 HD355 M9 RW6 TG6 **Y5** DG9 G5D GT9 TG9 Y6 G6

G9

(Can be used, but not recommended on case sizes: G13, GT13, M13, TG13)

GH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes:

CM6 DG5 TG5 G3 GT5 M6 TG6 CM9 DG6 G5 GT6 M9

**Y3** Y5 CM13 DG9 G5D GT9 M13 TG9 Y6 G6 GT13 **TG13** G9 G13

# NPR35DIN Mounting Kit (Rear mounting)

Can be used on these case sizes:

CN8H F6T N8H TN6T

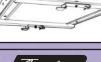
CN8T F8T N8T TN8H





CH35DIN Mounting Kit (Horizontal mounting) Can be used on these case sizes: RM6. RW6 WH35DIN Mounting Kit (Horizontal mounting) Can be used on these case sizes: WM6. WM9

WLH35DIN Mounting Kit (Horizontal mounting) Can be used on these case sizes: WL7, WL9





# **About Acopian's 3 Day Shipment Guarantee:**

In 1964, Acopian initiated its "3 Day Shipping Guarantee." Since then our product offerings have expanded to include many more lines of power supplies that ship within 3 Days as well as others that ship within 6 or 9 Days. These guarantees apply to every model in the Acopian catalog.

Our unique 3-day shipping guarantee has prompted many questions. Below are some of those most often asked:

# What does Acopian's 3-day shipping promise mean?

It means that power modules listed in this catalog are shipped within 3 days after we receive your order. High Voltage, Redundant, Rack Mounting, Systems and certain Switching power supplies are shipped within 9 days.

# **Has Acopian ever failed to meet this promise?** Never.

## Do options affect shipping time?

The 230 volt input option and moisture/fungus-proofing option require two additional days. All other options do not affect shipping time.

Is the 3-day promise affected by quantity? Suppose we need 50 or 100 pieces? The 3-day promise applies to orders for five or less modules. (Two or less for 9-day items). If requested, Acopian will ship five pieces of a larger order in 3 days and, with consideration of your requirement, schedule the balance. (Since each shipment is processed and priced as a separate order, for lowest prices request shipment in one lot.)

What if I need four or five different models? Does the 3-day promise still apply? Yes. Guaranteed 3-day shipment applies to one model or to a combination of models.

## Do I have to ask for 3-day shipment of my order?

3-day shipment is automatic. In fact, you must tell us if you want the shipment delayed.

## How long after you ship will I have the power supplies?

Transportation time varies with the carrier used. Unless otherwise requested, Acopian ships small orders by UPS Ground.

You say Acopian has never failed to meet the 3-day promise. How do you do it? Our facilities have been designed and equipped to meet our 3-day shipment promise. When your order is received, your power supplies are built specifically for you and shipped within three days. We do not ship from stock. (For this reason, we are unable to accept returns for credit.)

# I've seen other power supply manufacturers advertise "same-day shipment." Isn't that better than 3-day shipment?

A typical vendor's "same-day shipment" advertisement can only be fulfilled if the power supplies you need are in stock. Otherwise, a four to six week delay is not unusual before inventory is replenished and your order is shipped.

Acopian's 3-day shipment promise applies to ALL 3 Day models (larger units ship within 9 Days) and is not dependent on the quantity in stock. We build each unit after the order for that unit is received. If an order is needed faster, often times we can ship in less than 3 days.

If you require shipment even earlier than our standard promise, just let us know, we can usually ship sooner. We welcome the opportunity to work with you.

#### ACOPIAN...

#### ...answers your phone call with a live salesperson

No automated menus. The person who answers your call will courteously and promptly answer your questions, quote price and delivery, expedite your urgent requirements, and offer you immediate access to our engineers. Call toll free 800-523-9478.

## ...can customize power supplies for you

If a standard power supply does not meet all of your requirements, speak with one of our engineers. We can often modify the specifications, ratings and configuration of a supply. We can also combine several power supplies into a Multiple Output Power System with the operating features you specify (such as meters and switches) and ship it within 9 Days!

#### ...has a 5-year warranty

This is typical: One of our customers sent us an old power supply with a note indicating that the supply had been in continuous use since 1972 (33 years!), but he had recently noticed that the output voltage was low. We found that the capacitors had dried up, replaced them and returned the supply to the customer, who thanked us and said he intends to keep using it. We focus on making power supplies that will last a long time. There are power supplies that cost less than ours, or that are smaller than ours, but you won't find any that last longer than ours. All too often, low-priced supplies are densely packed, run hot, have short lifetimes and short warranties. All Acopian metal-cased power products have a 5-year warranty, but you can expect them to last a lot longer.

Purchase Acopian... 3-day shipment, long lasting power supplies, and unsurpassed customer service.

"In my business, Acopian is referred to as bulletproof. It never fails and lasts forever."

> - Steve Andrews, President Technical Options, Inc.

"If Acopian made automobiles, I'd buy one without question."

- David A. Price, Research Technologist Georgia Tech Research Institute

# **ORDERING INFORMATION & Terms and Conditions**

ACOPIAN SELLS FACTORY DIRECT WORLDWIDE: We do not use representatives or distributors. Contact Acopian for technical information or a quote.

WARRANTY: Acopian power supplies are warranted to be free from defects in material and workmanship for a period of five years (encapsulated devices, for one year) from date of original shipment. Acopian's obligation under this warranty is limited to repairing any power supply returned to the factory Service Department in Easton, PA and replacing any defective parts. Mini Encapsulated power supplies are not repairable. Authorization must be obtained from Acopian before a power supply may be returned for repair. Units must be well packed when shipping to Acopian; the repair of any damage incurred during shipment will be charged. Transportation charges are to be paid by the purchaser. A reinspection and handling charge will be applied to returned units found to have no defects. If a failure has been caused by misuse, operation in excess of specifications, or modification by the customer, repairs will be billed at cost; in such cases, a cost estimate will be submitted before work is started.

Acopian reserves the right to make changes or improvements in its products without incurring any obligation to install the same on products previously manufactured.

This warranty is in lieu of all other warranties, obligations, and liabilities, expressed or implied, and is the purchaser's exclusive remedy. Acopian makes no warranty, either express or implied, of merchantability, fitness for a particular purpose or otherwise. In no event shall Acopian be liable whether in contract, tort, or negligence, for special, indirect, incidental or consequential damages of any kind, including loss of business or profits, or any other losses incurred by the purchaser or any third party, the Customer's remedies being limited, at Acopian's option, to replacement, repair or credit at the price on the date of claim.

The validity, performance and construction of all terms and conditions and any sale made by Acopian shall be determined by the law of Pennsylvania, without regard to its conflict of law principles, and all parties to the transaction expressly consent to the jurisdiction of such courts and consent to the venue of the Court of Common Pleas for Northampton County, Pennsylvania.

PRICES: The prices shown are F.O.B. our factory; Easton, PA. or Melbourne, FL.. All prices and specifications are subject to change without notice. Minimum order is \$50.00.

TERMS: Net 30 days, subject to credit approval. Visa, MasterCard and American Express also accepted.

**SHIPPING:** Location permitting, small shipments are made by United Parcel Service, or by Parcel Post; larger shipments, by insured motor freight collect. Shipments can be made by air upon request. Risk of loss shall be F.O.B. Our Factory, even in cases where freight may be prepaid or allowed to destination by Acopian. If equipment is received in damaged condition, it is the customer's responsibility to contact the carrier and file a claim for damages.

TIME FOR DELIVERY: The time for delivery quoted by Acopian is the time required to ship from our plants. We will not be liable for delays in delivery caused by any reason beyond our control, including but not limited to acts of God, casualty, civil disturbance, labor disputes, transportation or supply difficulties, or any interruption of our facilities, and the quoted time for delivery shall be extended during the continuance of such conditions and for a reasonable time thereafter. In no event will Acopian be liable for any premium transportation, reprocurement, or similar costs incurred by the Customer as a result of conditions beyond Acopian's control resulting in Acopian's inability to deliver product in accordance with customer's requested delivery schedules.

**QUANTITY DISCOUNTS:** Discounts are available to quantity buyers and are dependent upon the order quantity and the manufacturing scheduling anticipated by the order, and apply only to the quantity and delivery ordered. Partial shipments are considered as separate orders for discounting purposes.

**EXPORT ORDERS:** A minimum export documentation charge of \$60.00 applies. (A minimum charge of \$25.00 applies on orders requiring customs forms for Canadian orders and for orders to certain U.S. territories.)

MOISTURE/FUNGUS PROOFING: Power supplies can be furnished with a moisture and fungus resistant varnish applied to interior surfaces. To order, add the suffix letter F to the model number. The additional cost is \$25.00 per output and requires two additional days. Not available on High Voltage, Mini Encapsulated, Rack Mounting, and Gold Box Switching models.

TAGGING: Maximum of 15 characters/spaces. Add \$10.00 to price.

TEST DATA: Cost, \$35.00 or 2% of order, whichever is greater.

**SPECIAL MODELS/MODIFICATIONS:** Cataloged models can be altered at the factory to meet special requirements. Contact the Applications Engineering Department to discuss your needs.

**PARTS:** The designs used in Acopian power supplies utilize standard components to the greatest practical extent. When replacements are required, the types originally used, or their equivalents, can usually be obtained most quickly from a local electronic components distributor.

Special components, such as transformers, are stocked at the factory warehouses. Contact the Applications Engineering Department for information on the parts required, referencing the model number of the power supply, the circuit designation of the component, and a description.

**PURCHASE ORDER ACCEPTANCE:** Orders are accepted subject to Acopian's Terms and Conditions. Any Terms and Conditions of any Purchaser's order, agreement, or understanding which are in addition to or inconsistent with Acopian's shall not be binding upon Acopian unless made in writing and accepted over the signature of an authorized officer of Acopian. Orders shall not be considered accepted until entered into production at our plant. Acopian reserves the right to refuse any order. All typographical and clerical errors are subject to correction by Acopian.

**RETURNED GOODS:** Acopian products are built on a per-order basis, and ordinarily no credit can be extended for their return. No goods will be accepted for return unless authorized in writing by Acopian.

**CHANGES:** The customer may, by a written notice, request changes within the general scope of the order, in the drawings, designs or specifications; method of shipment; and place of delivery. If any such change causes an increase or decrease in the cost, or the time required for the processing of any part of the order, an equitable adjustment shall be made in the price or delivery schedule, or both, and the order shall be modified in writing accordingly.

CANCELLATION: Suspension or cancellation of orders may be made only upon our written approval and on terms that will indemnify us against all loss.

**OVERTIME:** It is anticipated that any order will be processed during regular working hours on regular working days. If for any reason the Purchaser requests Acopian to process the order, or any portion of it, outside of such regular working hours, any overtime or other additional expense occasioned thereby shall be billed to and paid by the Purchaser as an extra cost. Acopian reserves the right to decline to process the order outside regular working hours.

**CUSTOMER DELAY OF WORK:** If the performance of all or any part of the work is delayed or interrupted by Customer's failure to act within the time specified (or within a reasonable time if no time is specified) and such act is not expressed or implied by the order, an adjustment shall be made in the cost of performance of the order caused by such delay or interruption and the order modified in writing accordingly. Adjustment will also be made in the delivery or performance dates and any other contractual provisions affected by such delay or interruption.

**GOVERNMENT SPECIFICATIONS:** Pricing is based upon industrial-grade construction, marking, packing, and packaging. Exception is taken to any MIL specifications, and to any requirements for the use of special forms, documentation other than quoted, and Government Source Inspection. Acopian must decline to quote on any other basis.

APPLICATIONS ASSISTANCE: Questions regarding the specifications, features, and use of any Acopian product should be directed to the Applications Engineering Department. A staff of power supply specialists will be pleased to assist you.

www.acopian.com - Online Ordering and Instant Quotes Online!



Acopian Technical Company

P.O. Box 638, Easton, PA 18044 • Phone: (610) 258-5441 • FAX: (610) 258-2842

Call toll free: (800) 523-9478 (International: Country Code 01)

ALL ACOPIAN
POWER SUPPLIES
NADE IN U.S.A.



PHOTO COURTESY OF THE ICECUBE PROJECT

# "At Project IceCube, it's absolutely critical to have a good power supply.

The ice must be as pure and clear as possible. If the power to the ice top sensor system were to fail, we would risk the tank water freezing without being controlled, resulting in bubbles and impurities, and very much reducing the quality of ice and quality of information that we can see with our detectors. We chose Acopian power supplies to power our pumping and degassing systems because of their reputation for reliability. The people at Acopian met all of our highly demanding specifications and, despite very little time until our window to ship to the Pole, they met our schedule.

We were 100% satisfied."

Jim Baccus Cable System Manager Project IceCube

(the international high-energy neutrino observatory being built and installed in the ice below South Pole Station)

# The world's most demanding environments demand Acopian power systems.

Design your own Acopian power system online with the System Builder at www.acopian.com. Simply enter your requirements, and you'll receive a quotation for fully wired multiple-output power systems, without the need for you to prepare mechanical layouts or search through a power supply catalog.

Each system will be completely wired, tested and shipped within 9 days after receipt of the order. Choose Acopian – the power supplies of choice for the world's leading engineers.



ALL ACOPIAN POWER SUPPLIES MADE IN U.S.A.

