

High Voltage REGULATED

Output ranges: 0-1,000 volts to 0-30,000 volts

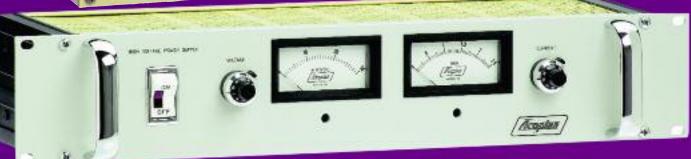


Modular AC-DC & DC-DC

- Shipped Within 6 Days
- Five Year Warranty
 (internal encapsulated module One Year)

Rack Mounting AC-DC

- Shipped Within 9 Days
- Five Year Warranty
 (internal encapsulated module One Year)



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
I-800-523-9478 • www.acopian.com
Order Factory Direct
Made in USA





High Voltage AC-DC

RACK MOUNTING REGULATED

Output ranges: 0 - 1,000 volts to 0 - 30,000 volts

- Shipped Within 9 Days
- Five Year Warranty (internal encapsulated module One Year)



Ideal for laboratory and instrumentation applications, these rack mounting supplies have the same output ratings and specifications as the modular supplies shown on pages 70 and 71, but additionally feature calibrated

ten-turn controls (with locking vernier dials) for precisely setting voltage and current. Voltmeter, ammeter and handles are standard. An 8´long shielded output cable is included.

SPECIFICATIONS

Input Voltage: 105-125 VAC, 50-400 Hz, single phase.

Input Current:

30 watt output ratings: 0.6A 60 watt output ratings: 1.2A

Output Polarity: Positive output is standard. For negative output, change first letter of model number from P to N.

Regulation (constant voltage operation):

Line: ±0.05% Load: ±0.05%

Regulation (constant current operation):

Line: ±0.1%

Load: $\pm 0.1\%$ plus 50 μ A. **Ripple:** 0.05%, peak-to-peak.

Output Controls: Voltage and current may be controlled by means of two 10-turn front panel adjustments with locking vernier dials. Control linearity is 1% of full rated output. Calibration accuracy is 1% of rated output plus 1% of setting. (Remotely located 1000 ohm potentiometers may alternately be used for output control.)

Metering: Voltmeter and ammeter are standard. Accuracy is 2% of full scale.

Voltage Monitor Terminal: Permits remote monitoring of output voltage, stepped down by ratio shown. Accuracy is 2% of maximum rated output voltage.

Current Monitor Terminal: Permits remote monitoring of output current, at mV/mA ratio shown. Accuracy is 2% of maximum rated output current.

Inhibit Terminal: Grounding inhibits output.

Input Protection: "Soft start" circuit minimizes start-up power stresses.

Output Programming: Output voltage and current may be programmed from 0 to full rating by means of control voltage inputs of 0 to +5.1 Vdc, ±2%.

Output Protection: Current regulation circuit protects power supply from short circuits, overload, and arcing.

Response Time: Less than 5 mS for 100 μA load step change.

Stability: 0.05% over eight hours, after 30 minute warmup.

Temperature Coefficient: 200 PPM/ $^{\circ}$ C = 0.02%/ $^{\circ}$ C (Typical).

Ambient Operating Temperature: -10 to +60°C. No derating required.

Storage Temperature: -20 to +85°C.

Humidity: Maximum of 90% relative, non-condensing.

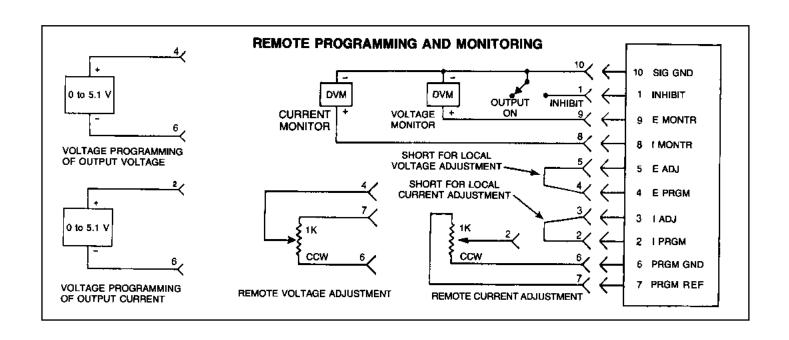
Connections:

Input, Control and Monitoring: Screw terminals. **Output:** High voltage connector (Type varies with model number). An 8´ shielded output cable, with mating connector installed, is provided.

OPTIONS

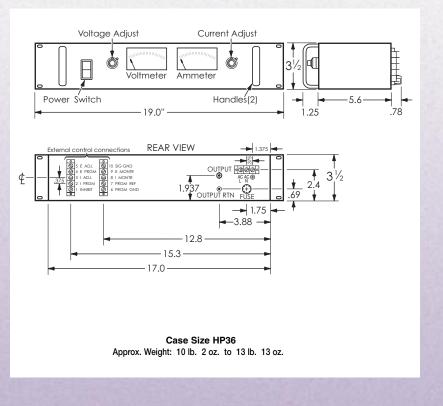
Terminal Strip Cover: Clips on AC input terminal strip. To order, add suffix "M" to model number and \$5.00 to price.

230 Volt Input: All models can be alternately furnished for operation on inputs of 210-250 VAC, 50-400 Hz, single phase. To order, add suffix "–230" to model number and add \$40.00 to price. The "–230" option requires two additional days.



Output	Output Current mA	Output Mo	nitor Ratio		Model (Positive)* Output)*	
Range kVdc		Voltage	Current mV/mA	(\$) Price		
0-1	30	1,000:1	100:1	1090	P01HP30	
0-1	60	1,000:1	10:1	1195	P01HP60	
0-1.5	20	1,000:1	100:1	1195	P01.5HP20	
0-1.5	40	1,000:1	100:1	1305	P01.5HP40	
0-2	15	1,000:1	100:1	1090	P02HP15	
0-2	30	1,000:1	100:1	1195	P02HP30	
0-2.5	12	1,000:1	100:1	1090	P02.5HP12	
0-2.5	24	1,000:1	100:1	1195	P02.5HP24	
0-3.5	8.5	1,000:1	100:1	1090	P03.5HP8.5	
0-3.5	17	1,000:1	100:1	1195	P03.5HP17	
0-5	6	10,000:1	100:1	1145	P05HP6	
0-5	12	10,000:1	100:1	1255	P05HP12	
0-7.5	4	10,000:1	100:1	1145	P07.5HP4	
0-7.5	8	10,000:1	100:1	1255	P07.5HP8	
0-10	3	10,000:1	1,000:1	1145	P010HP3	
0-10	6	10,000:1	100:1	1255	P010HP6	
0-12	2.5	10,000:1	1,000:1	1145	P012HP2.5	
0-12	5	10,000:1	100:1	1255	P012HP5	
0-15	2	10,000:1	1,000:1	1195	P015HP2	
0-15	4	10,000:1	100:1	1305	P015HP4	
0-18	1.6	10,000:1	1,000:1	1195	P018HP1.6	
0-18	3.2	10,000:1	1,000:1	1305	P018HP3.2	
0-20	1.5	10,000:1	1,000:1	1195	P020HP1.5	
0-20	3	10,000:1	1,000:1	1305	P020HP3	
0-22	1.3	10,000:1	1,000:1	1255	P022HP1.3	
0-22	2.6	10,000:1	1,000:1	1360	P022HP2.6	
0-25	1.2	10,000:1	1,000:1	1305	P025HP1.2	
0-25	2.4	10,000:1	1,000:1	1415	P025HP2.4	
0-30	1	10,000:1	1,000:1	1305	P030HP1	
0-30	2	10,000:1	1,000:1	1415	P030HP2	

^{*} Positive output is standard. For negative output, change first letter of model number from P to N.





High Voltage AC-DC

MODULAR REGULATED

Output ranges:

0 - 1,000 volts to 0 - 30,000 volts

- Shipped Within 6 Days
- Five Year Warranty (internal encapsulated module One Year)



These modular High Voltage supplies may be used as constant voltage or constant current sources. They may be remotely programmed by means of either voltage or resistance, and have provisions for remote monitoring and output inhibiting. All control and monitoring connections

are on a pluggable terminal block that functions as a connector, providing wiring convenience and permitting easy and rapid connect/disconnect. Outputs are arc/short circuit protected.

SPECIFICATIONS

Input Voltage: 105-125 VAC, 50-400 Hz, single phase.

Output Polarity: Positive output is standard. For negative output, change first letter of model number from P to N.

Regulation (constant voltage operation):

Line: ±0.05% Load: ±0.05%

Regulation (constant current operation):

Line: ±0.1%

Load: $\pm 0.1\%$ plus 50 μ A. **Ripple:** 0.05%, peak-to-peak.

Output Controls: Voltage and current may be controlled by means of two 20-turn front panel adjustments, or by using remotely located 1000 ohm potentiometers.

Output Programming: Output voltage and current may be programmed from 0 to full rating by means of control voltage inputs of 0 to +5.1 Vdc.

Voltage Monitor Terminal: Permits monitoring output voltage, stepped down by ratio shown. Accuracy is 2% of maximum rated output voltage.

Current Monitor Terminal: Permits monitoring output current at mV/mA ratio shown. Accuracy is 2% of maximum rated output current.

Inhibit Terminal: Grounding inhibits output.

Input Protection: "Soft start" circuit minimizes start-up power stresses.

Output Protection: Current regulation circuit protects power supply from short circuits, overload, and arcing.

Efficiency: Greater than 70% at full load.

Response Time: Less than 5 mS for 100 μ A load step change.

Stability: 0.05% over eight hours, after 30 minute warmup.

Temperature Coefficient: 200 PPM/°C = 0.02%/°C (Typical).

Ambient Operating Temperature: -10 to +60 °C. No derating required.

Storage Temperature: -20 to +85°C.

Humidity: Maximum of 90% relative, non-condensing.

Connections: 24" flying lead for high side of output and 5-way binding post for return (ground) are at the rear. AC input connections on separate terminal strip. All other connections on pluggable terminal block.

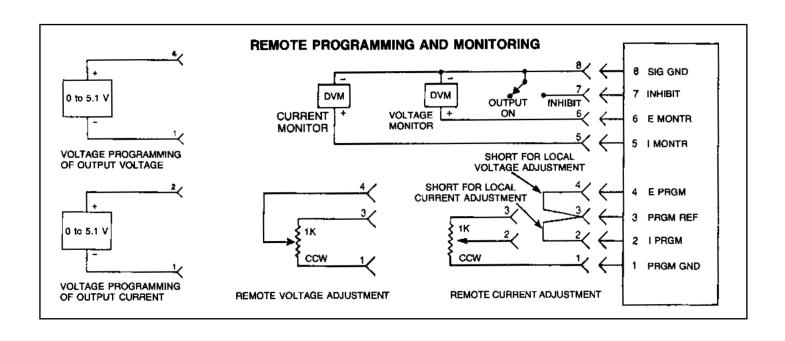
Mounting: Threaded mounting holes permit mounting to a chassis, cabinet wall or bracket, or they may be used on a test bench or tabletop. To mount from the power supply side of the mounting surface, see accessory Mounting Kit GB8 on page 91.

OPTIONS

Terminal Strip Cover: Clips on AC input terminal strip. To order, add suffix "M" to model number and \$5.00 to price.

Output Connector: Models with an output of 5000 volts or less can be provided with an MHV connector (and 8´ long detachable shielded output cable with mating MHV connector installed on one end) instead of the flying lead. To order, add suffix letter "T" to the model number and \$50.00 to price.

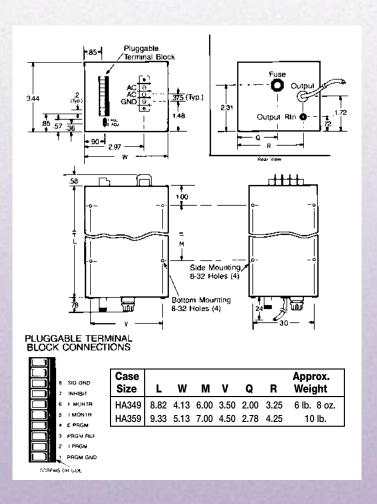
230 Volt Input: For operation on inputs of 210-250 VAC, 50-400 Hz, single phase. To order, add suffix "–230" to model number and \$40.00 to price. The "–230" option requires two additional days.



AC-DC MODELS

Output	Output	Output Monitor Ratio			Model	
Range kVdc	Current mA	Voltage	Current mV/mA	(\$) Price	(Positive)* Output)*	Case Size
0-1	30	1,000:1	100:1	650	P01HA30	HA349
0-1	60	1,000:1	10:1	760	P01HA60	HA359
0-1.5	20	1,000:1	100:1	650	P01.5HA20	HA349
0-1.5	40	1,000:1	100:1	760	P01.5HA40	HA359
0-2	15	1,000:1	100:1	650	P02HA15	HA349
0-2	30	1,000:1	100:1	760	P02HA30	HA359
0-2.5	12	1,000:1	100:1	650	P02.5HA12	HA349
0-2.5	24	1,000:1	100:1	760	P02.5HA24	HA359
0-3.5	8.5	1,000:1	100:1	650	P03.5HA8.5	HA349
0-3.5	17	1,000:1	100:1	760	P03.5HA17	HA359
0-5	6	10,000:1	100:1	720	P05HA6	HA349
0-5	12	10,000:1	100:1	830	P05HA12	HA359
0-7.5	4	10,000:1	100:1	720	P07.5HA4	HA349
0-7.5	8	10,000:1	100:1	830	P07.5HA8	HA359
0-10	3	10,000:1	1,000:1	720	P010HA3	HA349
0-10	6	10,000:1	100:1	830	P010HA6	HA359
0-12	2.5	10,000:1	1,000:1	720	P012HA2.5	HA349
0-12	5	10,000:1	100:1	830	P012HA5	HA359
0-15	2	10,000:1	1,000:1	760	P015HA2	HA349
0-15	4	10,000:1	100:1	870	P015HA4	HA359
0-18	1.6	10,000:1	1,000:1	760	P018HA1.6	HA349
0-18	3.2	10,000:1	1,000:1	870	P018HA3.2	HA359
0-20	1.5	10,000:1	1,000:1	870	P020HA1.5	HA349
0-20	3	10,000:1	1,000:1	975	P020HA3	HA359
0-22	1.3	10,000:1	1,000:1	870	P022HA1.3	HA349
0-22	2.6	10,000:1	1,000:1	975	P022HA2.6	HA359
0-25	1.2	10,000:1	1,000:1	975	P025HA1.2	HA349
0-25	2.4	10,000:1	1,000:1	1085	P025HA2.4	HA359
0-30	1	10,000:1	1,000:1	975	P030HA1	HA349
0-30	2	10,000:1	1,000:1	1085	P030HA2	HA359

^{*} Positive output is standard. For negative output, change first letter of model number from P to N.



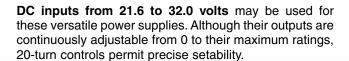


High Voltage DC-DC

MODULAR REGULATED

Output ranges: 0 - 1,000 volts to 0 - 30,000 volts

- Shipped Within 6 Days
- Five Year Warranty (internal encapsulated module - One Year)





Input Voltage: +21.6 to 32.0 Vdc.

Output Polarity: Positive output is standard. For negative output, change first letter of model number from P to N.

Regulation (constant voltage operation):

Line: ±0.05% Load: ±0.05%

Regulation (constant current operation):

Line: ±0.1%

Load: ±0.1% plus 50 μA.

Ripple: 0.05%, peak-to-peak.

Output Controls: Voltage and current may be controlled by means of two 20-turn front panel adjustments, or by using remotely located 1000 ohm potentiometers.

Output Programming: Output voltage and current may be programmed from 0 to full rating by means of control voltage inputs of 0 to +5.1 Vdc.

Voltage Monitor Terminal: Permits monitoring output voltage, stepped down by ratio shown. Accuracy is 2% of maximum rated output voltage.

Current Monitor Terminal: Permits monitoring output current at mV/mA ratio shown. Accuracy is 2% of maximum rated output current.

Inhibit Terminal: Grounding inhibits output.

Input Protection: "Soft start" circuit minimizes start-up power stresses.

Output Protection: Current regulation circuit protects power supply from short circuits, overload, and arcing.



These supplies have been designed to withstand severe arcing and short circuits without damage. They are ruggedly constructed with quality components to provide many years of reliable service.

Efficiency: Greater than 70% at full load.

Response Time: Less than 5 mS for 100 μA load step change.

Stability: 0.05% over eight hours, after 30 minute warmup.

Temperature Coefficient: 200 PPM/°C = 0.02%/°C (Typical).

Ambient Operating Temperature: -10 to +60°C.

No derating required.

Storage Temperature: -20 to +85°C.

Humidity: Maximum of 90% relative, non-condensing.

Connections: 24" flying lead for high side of output and 5-way binding post for return (ground). All other connections on pluggable terminal block.

Mounting: Threaded mounting holes permit mounting to a chassis, cabinet wall or bracket, or they may be used on a test bench or tabletop. To mount from the power supply side of the mounting surface or for DIN rail mounting, see accessory Mounting Kits on page 91.

OPTIONS

Output Connector: Models with an output of 5000 volts or less can be provided with an MHV connector (and 8' long detachable shielded output cable with mating MHV connector installed on one end) instead of the flying lead. To order, add suffix letter "T" to the model number and \$50.00 to price.

OPTIONAL OUTPUT CONNECTOR

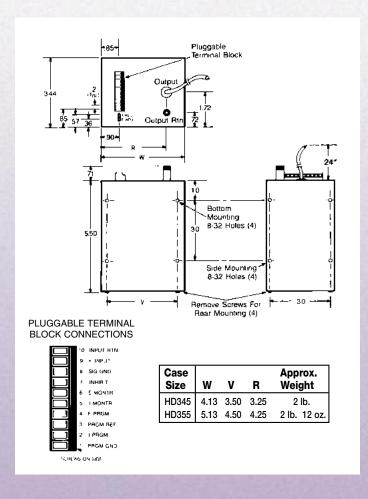
Models with an output of 5000 volts or less can be provided with an MHV connector (and 8' long detachable output cable with mating MHV connector installed on one end) instead of the flying lead. To order, add suffix letter "T" to the model number and \$50.00 to price.

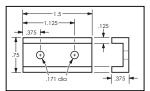


DC-DC MODELS

Output	Output	Output Monitor Ratio			Model		
Range kVdc	Current mA	Voltage	Current mV/mA	(\$) Price	(Positive)*	Case Size	
0-1	30	1,000:1	100:1	545	P01HD30	HD345	
0-1	60	1,000:1	10:1	650	P01HD60	HD355	
0-1.5	20	1,000:1	100:1	545	P01.5HD20	HD345	
0-1.5	40	1,000:1	100:1	650	P01.5HD40	HD355	
0-2	15	1,000:1	100:1	545	P02HD15	HD345	
0-2	30	1,000:1	100:1	650	P02HD30	HD355	
0-2.5	12	1,000:1	100:1	545	P02.5HD12	HD345	
0-2.5	24	1,000:1	100:1	650	P02.5HD24	HD355	
0-3.5	8.5	1,000:1	100:1	545	P03.5HD8.5	HD345	
0-3.5	17	1,000:1	100:1	650	P03.5HD17	HD355	
0-5	6	10,000:1	100:1	610	P05HD6	HD345	
0-5	12	10,000:1	100:1	720	P05HD12	HD355	
0-7.5	4	10,000:1	100:1	610	P07.5HD4	HD345	
0-7.5	8	10,000:1	100:1	720	P07.5HD8	HD355	
0-10	3	10,000:1	1,000:1	610	P010HD3	HD345	
0-10	6	10,000:1	100:1	720	P010HD6	HD355	
0-12	2.5	10,000:1	1,000:1	610	P012HD2.5	HD345	
0-12	5	10,000:1	100:1	720	P012HD5	HD355	
0-15	2	10,000:1	1,000:1	650	P015HD2	HD345	
0-15	4	10,000:1	100:1	760	P015HD4	HD355	
0-18	1.6	10,000:1	1,000:1	650	P018HD1.6	HD345	
0-18	3.2	10,000:1	1,000:1	760	P018HD3.2	HD355	
0-20	1.5	10,000:1	1,000:1	760	P020HD1.5	HD345	
0-20	3	10,000:1	1,000:1	870	P020HD3	HD355	
0-22	1.3	10,000:1	1,000:1	760	P022HD1.3	HD345	
0-22	2.6	10,000:1	1,000:1	870	P022HD2.6	HD355	
0-25	1.2	10,000:1	1,000:1	870	P025HD1.2	HD345	
0-25	2.4	10,000:1	1,000:1	975	P025HD2.4	HD355	
0-30	1	10,000:1	1,000:1	870	P030HD1	HD345	
0-30	2	10,000:1	1,000:1	975	P030HD2	HD355	

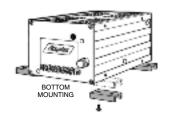
^{*} Positive output is standard. For negative output, change first letter of model number from P to N.





WALL MOUNTING KITS ...\$8

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.

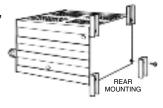


For Gold Box and modular High Voltage power supplies:

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



Y5

TG9 Y6

For Narrow Profile power supplies:

NP6 Mounting Kit (#6-32 mounting holes)

Can be used on these case sizes:

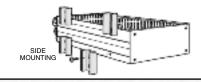
AMC, CN8T, DN6B, DN6A, DN8A, DN8, F6T, F8T, N8T, WL9, WN6A, WN6B, WN8, WN8A, TN6T

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



GT5 HD345 M6 RM6 TG5

GT6 HD355 M9 RW6 TG6

TG5

TG6

TG13

M13 TG9

Y3

Y5

Y6

DIN RAIL MOUNTING KITS ...\$15

NPH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes:

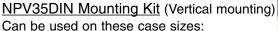
CN8H DN6A F6T N8H TN6T

CN8T DN6B F8T

DN8 DN8A N8T TN8H

WN6B WN8 WN8A

WN6A



CN8H DN6A F6T N8H TN6T

CN8T DN6B F8T N8T TN8H DN8

DN8A

WN8 WN8A

WN6A

WN6B

WL35DIN Mounting Kit (Vertical mounting) Can be used on this case size: WL9

NPR35DIN Mounting Kit (Rear mounting)

CN8T F8T N8T TN8H (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

> CH35DIN Mounting Kit (Horizontal mounting) Can be used on these case sizes: RM6, RW6

GT5

GT6

GT13

G5D GT9

M6

M9

GR35DIN Mounting Kit (Rear mounting)

GT9

Can be used on these case sizes:

G5D

G6 G9

G3

G5

G6

G9 G13

CM6 DG5 G3

CM9 DG6 G5

DG9

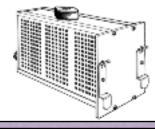
DG5

DG6

CM9

CM13 DG9

Can be used on these case sizes: CN8H F6T N8H TN6T



WH35DIN Mounting Kit (Horizontal mounting) Can be used on these case sizes: WM6, WM9





"Whenever I need a power supply for any project, I always check Acopian first. Your customer service is first rate, and I really like the fast, dependable shipping. The reliability of your products is an additional bonus – they seem to last forever."

- Gudrun Kleist, Engineering Associate Lawrence Berkeley National Laboratory

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.

Acopian |

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)

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

Downloaded from **Elcodis.com** electronic components distributor

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

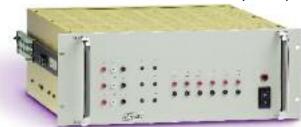
Project IceCube

(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.



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