



Rack Mounting
WIDE ADJUST OUTPUT
 (fixed & adjustable current limiting)
LINEAR REGULATED
AC-DC

- Shipped Within 9 Days
- U.L. Recognized
- Five Year Warranty



(Meters and Handles optional)



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
 1-800-523-9478 • www.acopian.com
 Order Factory Direct   
 Made in USA 



wide adjust output

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Similar to the rack mounting power supplies listed on pages 28 and 29, but with broadened output voltage ranges. All models may be programmed through their voltage ranges by means of external resistance. Models with adjustable current limiting have a constant-voltage/constant-current crossover characteristic, and so may be used as constant current sources.

SPECIFICATIONS

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

Regulation, Ripple (in constant voltage mode):

Line Regulation: $\pm 0.005\%$ or 2 mV, whichever is greater.
Load Regulation: $\pm 0.005\%$ or 2 mV, whichever is greater.
Ripple: 0.25 mV rms.

Regulation, Ripple (in constant current mode):

Line Regulation: $\pm 0.1\%$ or 2 mA.
Load Regulation: $\pm 0.2\%$ or 5 mA.
Ripple: 0.1% rms.

Remote Voltage Sensing: Provision for sensing the output voltage across the load, to compensate voltage drops in output wiring, is a standard feature.

Remote Voltage Programming: The output voltage may be controlled by means of external resistance connected in series with the - S lead.

Voltage Programming Coefficient: See table.
Calibration tolerance, $\pm 2\%$.

Current Limiting/Programming: Models with fixed current limiting have a rolloff characteristic with automatic recovery. All others have current limiting with a constant-voltage/constant-current crossover characteristic.

Polarity: Output is floating; either positive or negative terminal may be grounded or floated up to 300 volts above ground.

Controls: Coarse and fine voltage adjustments, and the current limit adjustment, are located at the rear of the assembly.

Temperature Coefficient (in constant voltage mode): 0.02%/°C (Typical).

Ambient Operating Temperature: -20 to +71°C.

Storage Temperature: -55 to +85°C.



(Meters and handles optional)

OPTIONS

Overvoltage Protection: An internally mounted overvoltage protection circuit, set approximately 20% above the maximum output voltage rating of the supply, is available on all models. To order, add prefix "V" to the model number, and increase standard price as follows:

Maximum output of	6-50V	100V
All case sizes except 5P17	\$35.00	\$45.00
Case size 5P17	\$85.00	

Remote Current Limiting Adjustment: All models having numbers beginning with the letter P have a built in current limit control. Provision for control of the current limit setting by adjustment of an external resistance is available as an option. To order, add the prefix letter "E" to the model number, and add \$25.00 to the standard price.

The current limit setting is inversely related to resistance. Use a 200 ohm, 1/2 W potentiometer.

Ammeter: Add suffix "A" to model number and \$60.00 to price.

Voltmeter: Add suffix "F" to model number and \$60.00 to price.

Handles: Add suffix "H" to model number and \$30.00 to price.

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

Front Panel Voltage Controls: For voltage controls (coarse and fine) mounted on the front panel, instead of the standard screwdriver-slot adjustments at the rear, add suffix "P" to the model number and \$25.00 to price.

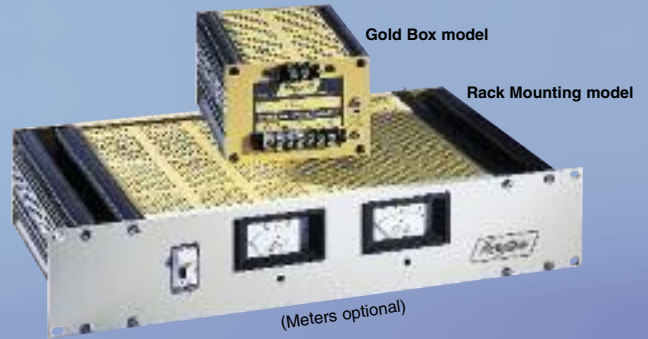
Front Panel Current Limiting Control: For adjustable current limiting models, a current limit control can be mounted on the front panel. Add suffix "Y" to the model number and \$15.00 to price.

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

Power Supplies Programmable with a 0-10 Vdc Control Voltage

These power supplies have the broad adjustment capability required for analog instrumentation and circuitry, process controls, basic research, and similar applications.

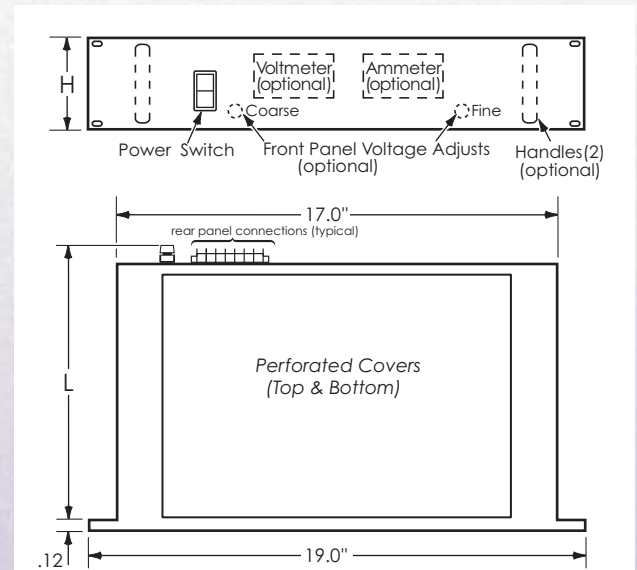
The output voltage may be manually controlled either at the power supply or remotely, or it may be programmed with the analog output from a PLC or digital-to-analog converter.



See pages 60 and 61

Output Voltage Range	Output Current Amps. at			Voltage Prmg. Coeff. (Ω/V)	Case Size	Voltage Programmable Fixed Current Limiting		Voltage Programmable Adjust. Current Limiting	
	40°C	55°C	71°C			Model	Price(\$)	Model	Price(\$)
0-6	10.0	8.0	6.0	820	3P11	A06PX10	\$575	P06PX10	\$620
0-6	16.0	12.8	9.6	820	5P12	A06PX16	\$705	P06PX16	\$750
0-6*	23.0	18.4	13.8	820	3P17	A06PX23	\$875	P06PX23	\$920
0-6*	30.0	24.0	18.0	820	5P17	A06PX30	\$1015	P06PX30	\$1060
0-15	7.0	5.6	4.2	330	3P11	A015PX7	\$575	P015PX7	\$620
0-15	10.0	8.0	6.0	330	5P12	A015PX10	\$705	P015PX10	\$750
0-15*	13.0	10.4	7.8	330	3P17	A015PX13	\$875	P015PX13	\$920
0-30	4.0	3.2	2.4	160	3P11	A030PX4	\$575	P030PX4	\$620
0-30	5.0	4.0	3.0	160	5P12	A030PX5	\$705	P030PX5	\$750
0-30*	7.0	5.6	4.2	160	3P17	A030PX7	\$875	P030PX7	\$920
0-30*	9.0	7.2	5.4	160	5P17	A030PX9	\$1015	P030PX9	\$1060
0-50	2.4	1.9	1.5	1000	3P11	A050PX2	\$575	P050PX2	\$620
0-50	3.0	2.4	1.8	1000	5P12	A050PX3	\$705	P050PX3	\$750
0-50*	5.0	4.0	3.0	1000	5P17	A050PX5	\$1015	P050PX5	\$1060
0-100*	1.2	.9	.7	500	3P11	A0100PX1.2	\$635	P0100PX1.2	\$680
0-100*	1.5	1.2	.9	500	5P12	A0100PX1.5	\$820	P0100PX1.5	\$865

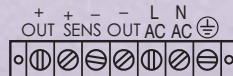
*Not U.L. recognized when this catalog was published.



CONNECTIONS:

Case sizes

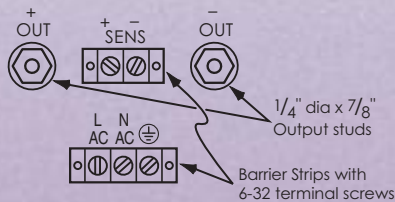
3P11 and 5P12:



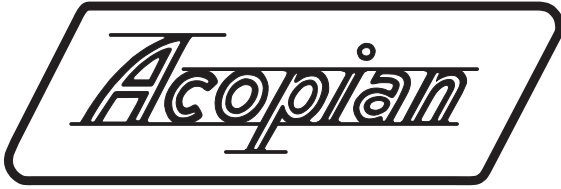
3P11 Barrier Strip with 6-32 terminal screws
5P12 Barrier Strip with 8-32 terminal screws

Case sizes

3P17 and 5P17:



Case Size	H	L	Approx. Weight
3P11	3 1/2"	10 7/8"	16 lb.
3P17	3 1/2"	16 13/16"	26 lb.
5P12	5 1/4"	11 15/16"	20 lb.
5P17	5 1/4"	16 13/16"	30 lb.



“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, procurement, 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!



Since 1957

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
MADE 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)

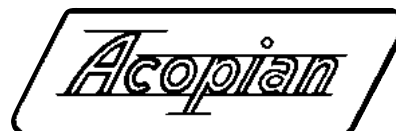
The world’s most demanding environments demand Acopian power systems.

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.



Acopian Technical Company

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