



# Rack Mounting

## LINEAR REGULATED AC-DC wide adjust output (fixed & adjustable current limiting)

- Shipped Within 9 Days
- U.L. Recognized
- Five Year Warranty
-  (w/exceptions)



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- Fast Shipping? Acopian invented it! For over half a century, Acopian has built and shipped millions of power supplies within 3-DAYS after receipt of order. And we still do today! View our 3-DAY Shipping Promise: [www.acopian.com/3dayship.html](http://www.acopian.com/3dayship.html)
- You ALWAYS talk to a real person when you call Acopian.
- Acopian power supplies last a *very long time!*
- You can email [3day@acopian.com](mailto:3day@acopian.com) anytime for 24/7 product support.
- The *Online System Builder* ([www.acopian.com/SystemBuilder](http://www.acopian.com/SystemBuilder)) is a convenient way to get your own custom power supply or power system (and most ship within 9 Days).
- You can order Acopian power supplies factory direct.
- ALL Acopian products are made in the USA.



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wide adjust output

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AC-DC

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Similar to the rack mounting power supplies listed on pages F39 and F40, 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.

**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.

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

**Ammeter:** Add suffix "A" to model number.

**Voltmeter:** Add suffix "F" to model number.

**Handles:** Add suffix "H" to model number.

**Terminal Strip Cover:** Clips on. To order, add suffix "M" to model number.

**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.

**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.

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

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

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

### CONNECTIONS:

#### Case sizes

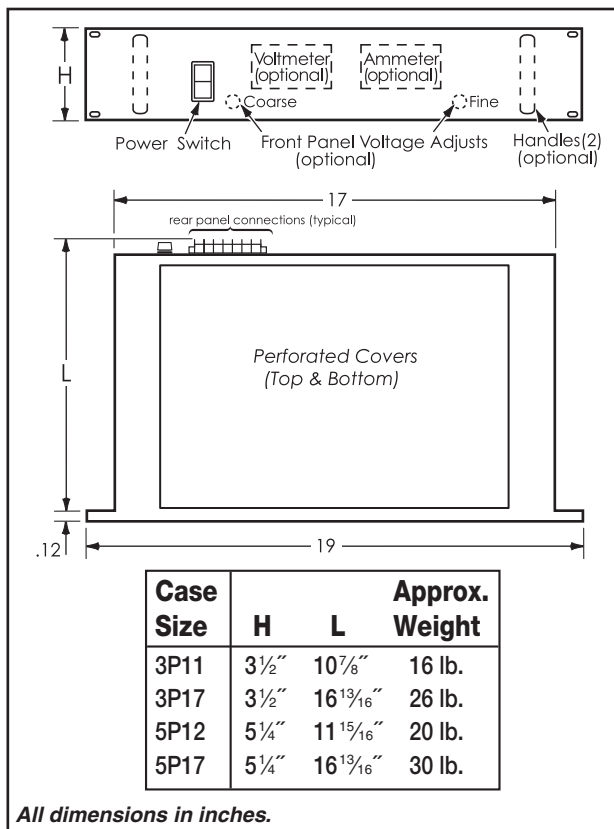
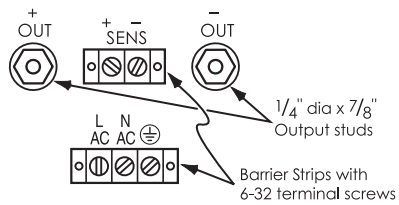
#### 3P11 and 5P12:



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

#### Case sizes

#### 3P17 and 5P17:

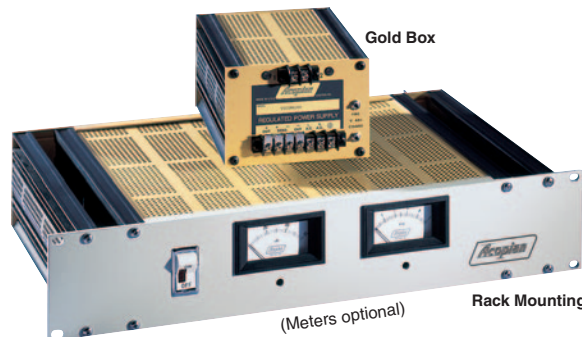


## Power Supplies Programmable with a 0-10 Vdc Control Voltage

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 F23 and F24



**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 or Melbourne, FL, 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. ('EXW Factory' if outside the 50 United States.) All prices and specifications are subject to change without notice.

**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, FedEx, DHL (international orders) 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 to certain U.S. territories requiring customs forms.)

**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. This option requires two additional days and is not available on High Voltage, Mini Encapsulated, Rack Mounting, and Gold Box Switching models.

**TAGGING:** 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 IS AN ISO 9001 CERTIFIED COMPANY**