

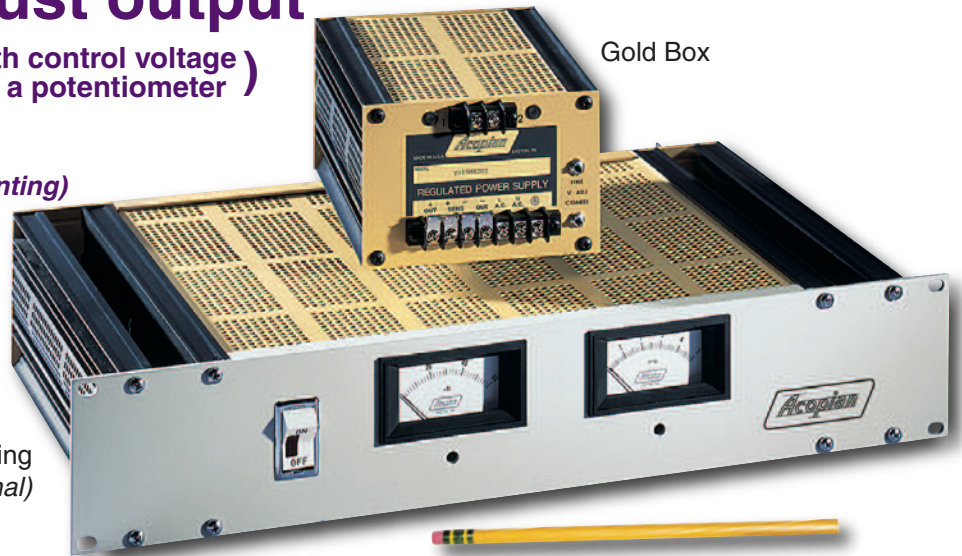
**Acopian** Power Supplies

# Gold Box & Rack Mounting

**LINEAR REGULATED  
AC-DC wide adjust output  
PROGRAMMABLE ( with control voltage )  
or a potentiometer )**

- Shipped Within 3 Days (*Gold Box*)
- Shipped Within 9 Days (*Rack Mounting*)
- Five Year Warranty

**RoHS** (*Gold Box models*)  
COMPLIANT



Gold Box

Rack Mounting  
(meters optional)

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

- 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.

**Acopian**  
**POWER SUPPLIES**

Easton, PA & Melbourne, FL  
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Order Factory Direct  
Made in USA



## Gold Box & Rack Mounting

### WIDE ADJUST OUTPUT

### PROGRAMMABLE (with a control voltage or a potentiometer)

LINEAR REGULATED

AC-DC

- Shipped Within 3 Days (Gold Box models)
- Shipped Within 9 Days (Rack models)
- Five Year Warranty

**RoHS**  
COMPLIANT (Gold Box models)



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.

#### SPECIFICATIONS

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

**Regulation, Ripple:**

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.

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

**Controls:** Coarse and fine voltage adjustments are located on the front panel of Gold Box models and on the rear panel of Rack Mounting models.

**Output Voltage Programming:**

**With a Control Voltage:** The output voltage may be programmed from 0 to full rating by means of control voltage inputs of 0 to +10Vdc. Linearity, 1%. Contact factory for information on other input ranges.

**With a Potentiometer:** The output voltage may be programmed by means of a remotely located 5K potentiometer.

**Current Limiting:** Rolloff characteristic with automatic recovery.

**Polarity:** Output is floating; either positive or negative terminal may be grounded or floated up to 300 volts above ground. When using a control voltage input, its negative side must be connected to the -S(sense) terminal.

**Temperature Coefficient:** 0.02%/°C (Typical).

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

**Storage Temperature:** -55 to +85°C.

**Mounting (Gold Box models):** Threaded mounting holes permit mounting to a chassis, cabinet wall or bracket. To mount from the power supply side of the mounting surface or for DIN rail mounting, see accessory Mounting Kits on page H3.

#### 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.

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

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

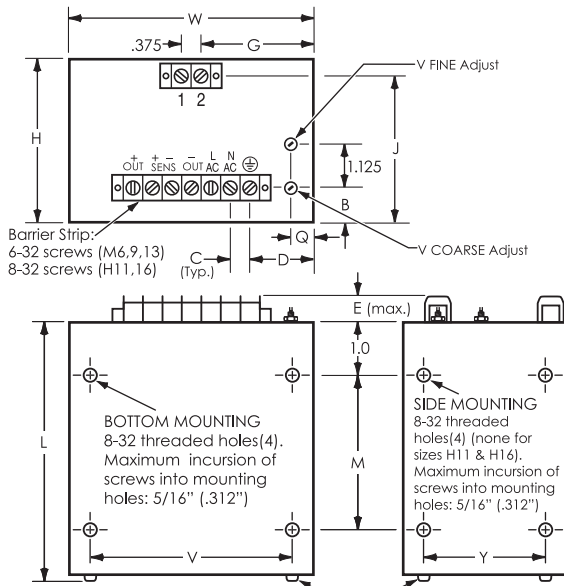
**Ammeter (Rack Mounting models):** Add suffix "A" to model number.

**Voltmeter (Rack Mounting models):** Add suffix "F" to model number.

**Handles (Rack Mounting models):** Add suffix "H" to model number.

**Front Panel Controls (Rack Mounting models):** 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.

## Gold Box



For **REAR MOUNTING**, remove original screws(4) and use 8-32 Type F self-tapping screws. They should extend at least 5/16" (0.312") into the power supply case.

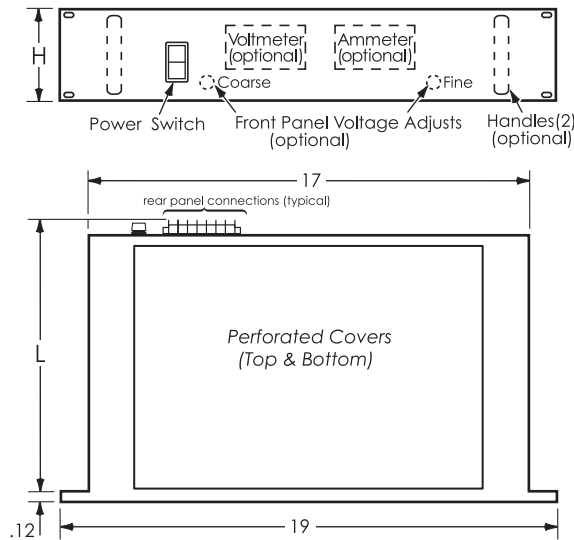
Case Size	L	W	H	M	V	Y	E	Q	B	C	D	G	J	Approx. Weight
M6	6.59	5.12	3.44	4.0	4.5	3.0	.58	.5	.75	.375	1.44	2.37	3.09	5 lb. 10 oz.
M9	9.25	5.12	3.44	6.0	4.5	3.0	.58	.5	.75	.375	1.44	2.37	3.09	6 lb. 7 oz.
M13	13.25	5.12	3.44	10.0	4.5	3.0	.58	.5	.75	.375	1.44	2.37	3.09	8 lb. 8 oz.
H11	11.25	7.37	5.12	8.0	6.75	4.56	.78	1.12	1.25	.562	2.25	3.75	4.72	13 lb. 3 oz.
H16	16.00	7.37	5.12	11.0	6.75	4.56	.78	1.12	1.25	.562	2.25	3.75	4.72	18 lb.

All dimensions in inches.

## GOLD BOX MODELS

Output Voltage Range	Output Current Amps. at			Case Size	Model
	40°C	55°C	71°C		
0-6	1.2	1.2	1.2	M6	Y06MX120
0-6	2.0	2.0	2.0	M6	Y06MX200
0-6	3.0	2.5	2.0	M6	Y06MX300
0-6	5.0	4.0	3.0	M9	Y06MX500
0-6	8.0	7.0	6.0	M13	Y06MX800
0-6	12.0	10.0	7.0	H11	Y06HX1200
0-6	16.0	13.0	10.0	H16	Y06HX1600
0-15	1.0	1.0	1.0	M6	Y015MX100
0-15	2.0	1.6	1.2	M6	Y015MX200
0-15	3.0	2.4	1.8	M9	Y015MX300
0-15	5.0	4.0	2.5	M13	Y015MX500
0-15	8.0	6.0	4.0	H11	Y015HX800
0-15	10.0	8.0	6.0	H16	Y015HX1000
0-30	.50	.50	.50	M6	Y030MX50
0-30	1.0	1.0	1.0	M6	Y030MX100
0-30	1.6	1.4	1.2	M9	Y030MX160
0-30	2.5	2.0	1.5	M13	Y030MX250
0-30	4.0	3.0	2.0	H11	Y030HX400
0-30	5.0	4.0	3.0	H16	Y030HX500
0-50	.35	.34	.33	M6	Y050MX35
0-50	.60	.50	.40	M6	Y050MX60
0-50	.85	.75	.65	M9	Y050MX85
0-50	1.2	.96	.72	M13	Y050MX120
0-50	2.4	1.9	1.4	H11	Y050HX240
0-50	3.0	2.4	1.8	H16	Y050HX300
0-100	.10	.09	.08	M6	Y0100MX10
0-100	.25	.20	.15	M6	Y0100MX25
0-100	.45	.36	.27	M9	Y0100MX45
0-100	.60	.48	.36	M13	Y0100MX60
0-100	1.2	.96	.72	H11	Y0100HX120
0-100	1.5	1.2	.90	H16	Y0100HX150

## Rack Mounting



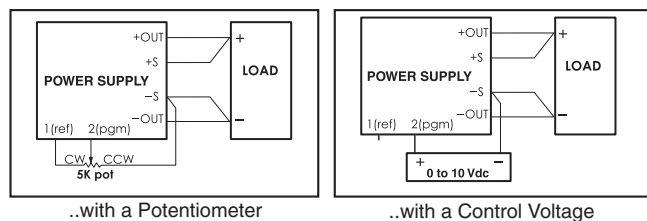
Case Size	H	L	Approx. Weight
3P11	3 1/2"	10 3/4"	16 lb.
3P17	3 1/2"	17"	26 lb.
5P12	5 1/4"	11 7/8"	20 lb.
5P17	5 1/4"	16 7/8"	30 lb.

All dimensions in inches.

## RACK MOUNTING MODELS

Output Voltage Range	Output Current Amps. at			Case Size	Model
	40°C	55°C	71°C		
0-6	10.0	8.0	6.0	3P11	Y06PX10
0-6	16.0	12.8	9.6	5P12	Y06PX16
0-6	23.0	18.4	13.8	3P17	Y06PX23
0-6	30.0	24.0	18.0	5P17	Y06PX30
0-15	7.0	5.6	4.2	3P11	Y015PX7
0-15	10.0	8.0	6.0	5P12	Y015PX10
0-15	13.0	10.4	7.8	3P17	Y015PX13
0-30	4.0	3.2	2.4	3P11	Y030PX4
0-30	5.0	4.0	3.0	5P12	Y030PX5
0-30	7.0	5.6	4.2	3P17	Y030PX7
0-30	9.0	7.2	5.4	5P17	Y030PX9
0-50	2.4	1.9	1.5	3P11	Y050PX2
0-50	3.0	2.4	1.8	5P12	Y050PX3
0-50	5.0	4.0	3.0	5P17	Y050PX5
0-100	1.2	.9	.7	3P11	Y0100PX1.2
0-100	1.5	1.2	.9	5P12	Y0100PX1.5

## PROGRAMMING



## WALL MOUNTING KITS

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.

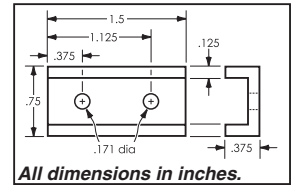
### For 'Gold Box' and (modular) 'High Voltage' power supplies:

#### **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, LM6A\*, LM8A\*, LM10A\*, M6, M9, M13, RM6, RW6 TG5, TG6, TG9, TG13, TH11, WG7, WM6, WM9, Y3, Y5, Y6, YH11, YA

\*For rear mounting brackets horizontally on **LM cases only**, use GBR Mounting Kit



### For 'Narrow Profile' power supplies:

#### **NP6 Mounting Kit** (#6-32 mounting holes)

Can be used on these case sizes:

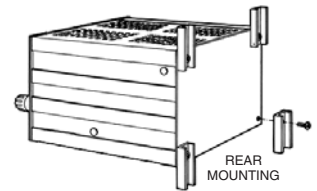
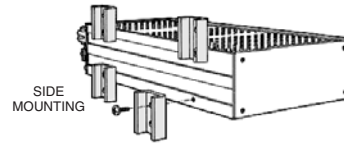
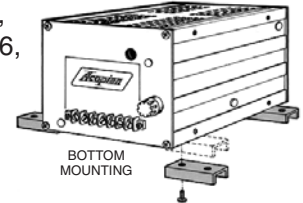
AMC, CN8T, DN6B, DN6A, DN8A, DN8, F6T, F8T, N8T, WL7, WL9, WN6A, WN6B, WN8, WN8A, WN8B, TN6T

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

Can be used on these case sizes:

CN8H, N8H, TN8H

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



## DIN RAIL MOUNTING KITS

#### **CH35DIN Mounting Kit** (Horizontal mounting)

Can be used on these case sizes: RM6, RW6

#### **GH35DIN Mounting Kit** (Horizontal mounting)

Can be used on these case sizes:

CM6 DG5 G3 GT5 M6 TG5 Y3  
 CM9 DG6 G5 GT6 M9 TG6 Y5  
 CM13 DG9 G5D GT9 M13 TG9 Y6  
 G6 GT13 TG13  
 G9  
 G13

#### **GR35DIN Mounting Kit** (Rear mounting)

Can be used on these case sizes:

CM6 DG5 G3 GT5 HD345 M6 RM6 TG5 Y3  
 CM9 DG6 G5 GT6 HD355 M9 RW6 TG6 Y5  
 DG9 G5D GT9 TG9 Y6  
 G6  
 G9

*(GR35DIN can be used, but is not recommended on case sizes: G13, GT13, M13, TG13)*

#### **LR35DIN Mounting Kit** (Rear mounting)

#### **LV35DIN Mounting Kit** (Vertical mounting)

#### **LH35DIN Mounting Kit** (Horizontal mounting)

Can be used on these case sizes: LM6A, LM8A, LM10A

#### **NPH35DIN Mounting Kit** (Horizontal mounting)

Can be used on these case sizes:

CN8H DN6A F6T N8H TN6T WN6A  
 CN8T DN6B F8T N8T TN8H WN6B  
 DN8 WN8  
 DN8A WN8A  
 WN8B

#### **NPR35DIN Mounting Kit** (Rear mounting)

Can be used on these case sizes:

CN8H F6T N8H TN6T  
 CN8T F8T N8T TN8H

#### **NPV35DIN Mounting Kit** (Vertical mounting)

Can be used on these case sizes:

CN8H DN6A F6T N8H TN6T WN6A  
 CN8T DN6B F8T N8T TN8H WN6B  
 DN8 WN8  
 DN8A WN8A  
 WN8B

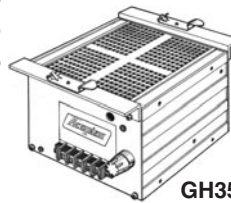
#### **WH35DIN Mounting Kit** (Horizontal mounting)

Can be used on these case sizes: WM6, WM9

#### **WL35DIN Mounting Kit** (Vertical mounting)

#### **WLH35DIN Mounting Kit** (Horizontal mounting)

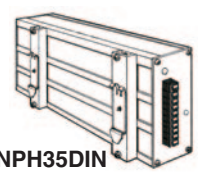
Can be used on these case sizes: WL7, WL9



GH35DIN



LH35DIN



NPH35DIN



GR35DIN



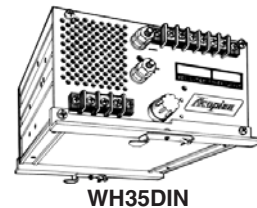
LR35DIN



NPV35DIN



WLH35DIN



WH35DIN



NPR35DIN

**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**