



Narrow Profile SWITCHING REGULATED (to 120 watts)

- Shipped Within 3 Days
- Five Year Warranty

AC-DC single output

DC-DC (DC input can be used on 230 VAC models)



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 



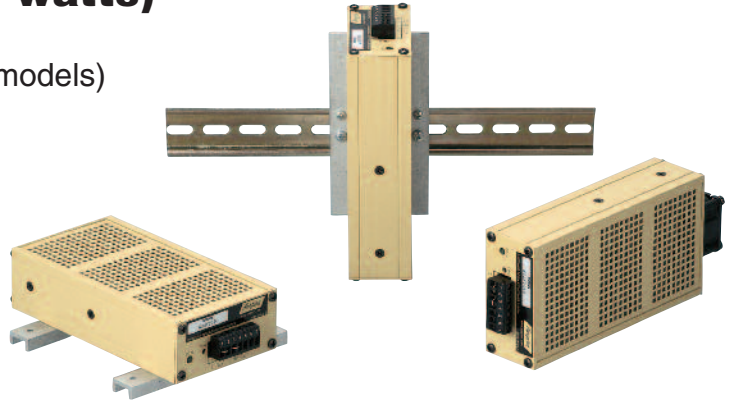
Narrow Profile

SWITCHING REGULATED (to 120 watts)

AC-DC single output

DC-DC (DC input can be used on 230 VAC input models)

- Shipped Within 3 Days
- Five Year Warranty



This newest group of Narrow Profile switchers includes convection cooled models less than 7" long that

provide outputs up to 75 watts and fan cooled models less than 8" long that provide outputs to 120 watts.

STANDARD FEATURES

- Internal EMI Filter and Shielding
- Pluggable Input/output Terminal Block
- Excellent Load/line Regulation
- Overcurrent, Overvoltage Protection
- No Minimum Load Required

SPECIFICATIONS

Input Voltage: 90-132 VAC, 47-420 Hz, single phase. 180-265 VAC input is also available (see Options).

DC Input: Not applicable on 115 VAC models. On 230 VAC models, 200-375 Vdc input can be used. DC input may be connected without regard to polarity.

Inrush current: Cold start, (thermistor limiter) 15A peak @ 115 VAC; 30A peak @ 230 VAC.

Startup Time: 1 second typical.

Input Undervoltage: An input of less than 90 VAC (180 VAC with "-230" option) will not damage power supply.

Regulation:

- Line:** $\pm 0.05\%$ or 5 mV, whichever is greater.
- Load:** $\pm 0.05\%$ or 5 mV, whichever is greater.

Output Voltage Remote Adjustment: The output voltage may be controlled by means of an external 1K potentiometer.

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

Drift: $\pm 0.1\%$ typical over 8 hours, after 30 minute warmup.

Temperature Coefficient: $\pm 0.02\%/^{\circ}\text{C}$ (Typical).

Holdup Time: 20 mS minimum.

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

Remote Sensing: Compensates up to 0.5 volt drop per output line, within the limits of the output voltage adjustment range.

Overload/Short Circuit Protection: Current limiting with automatic recovery.

Overvoltage Protection: Automatic reset.

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

Output Indicator (DC on): Green LED.

Efficiency: See table. (Typical, at nominal input voltage, with full load.)

Ambient Operating Temperature: 0 to $+71^{\circ}\text{C}$.

Storage Temperature: -40 to $+85^{\circ}\text{C}$.

Cooling: Case size WN6A: forced-air cooled; air enters rear of power supply and exits from top. Case size WN6B: convection cooled.

Switching Frequency: 100 kHz (Typical).

Dielectric Withstand Voltage Isolation

Input to output:	4242 Vdc	300 Vdc
Input to case:	2121 Vdc	300 Vdc
Output to case:	750 Vdc	300 Vdc

Internal Failure Protection: Provided by internal fuse.

Mounting: 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 91.

OPTIONS

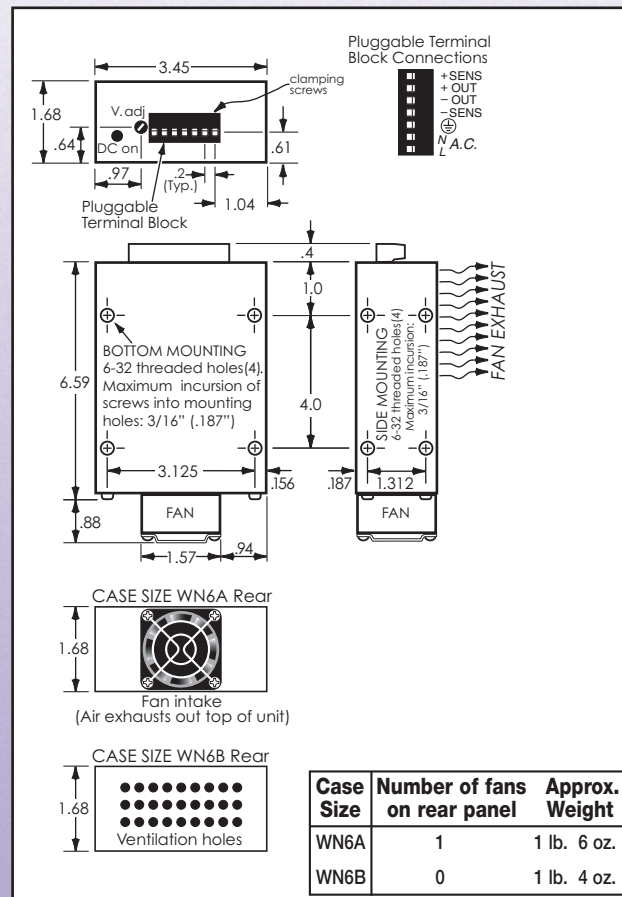
230 Volt Input: For applications where operation on an input of 180-265 VAC, 47-420 Hz, is desired. To order, add suffix "-230" to the model number. No increase in price.

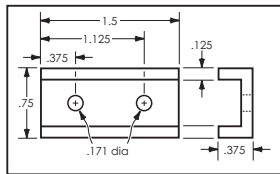
On 230 VAC models, 200-375 Vdc input can also be used.

Narrow Profile SWITCHING REGULATED (to 120 watts)

Nominal Output Voltage	Adjust Range ±V	Output Current Amps. at		Ripple mV (@ 25 MHz BW)		Effic. (Typ.) %	(\$ Price	Model	Case Size
		40°C	71°C	RMS	P-P				
3.3	.5	12	8.4	10	50	66	185	W3.3FT1200	WN6B
3.3	.5	15	10.5	10	50	66	225	W3.3FT1500	WN6A
5	.5	12	8.4	10	50	70	185	W5FT1200	WN6B
5	.5	15	10.5	10	50	70	225	W5FT1500	WN6A
6	.5	10	7	10	50	71	185	W6FT1000	WN6B
6	.5	12.5	8.6	10	50	71	225	W6FT1250	WN6A
7	.5	8.5	5.9	10	50	71	185	W7FT850	WN6B
7	.5	10.6	7.4	10	50	71	225	W7FT1060	WN6A
8	.5	7.5	5.2	15	100	72	185	W8FT750	WN6B
8	.5	9.4	6.6	15	100	72	225	W8FT940	WN6A
9	.5	6.6	4.6	15	100	73	185	W9FT660	WN6B
9	.5	9.3	6.5	15	100	73	225	W9FT930	WN6A
10	.5	6	4.2	15	100	73	185	W10FT600	WN6B
10	.5	9.2	6.4	15	100	73	225	W10FT920	WN6A
12	.5	5.8	4.0	15	100	76	185	W12FT580	WN6B
12	.5	9.1	6.3	15	100	76	225	W12FT910	WN6A
13	.5	5.3	3.7	15	100	76	185	W13FT530	WN6B
13	.5	8.1	5.6	15	100	76	225	W13FT810	WN6A
14	.5	4.9	3.4	15	100	76	185	W14FT490	WN6B
14	.5	7.7	5.4	15	100	76	225	W14FT770	WN6A
15	.5	4.7	3.3	15	100	76	185	W15FT470	WN6B
15	.5	7.4	5.2	15	100	76	225	W15FT740	WN6A
16	.5	4.4	3	15	100	76	185	W16FT440	WN6B
16	.5	6.8	4.7	15	100	76	225	W16FT680	WN6A
18	.5	4	2.8	15	100	78	185	W18FT400	WN6B
18	.5	6	4.2	15	100	78	225	W18FT600	WN6A
20	.5	3.7	2.6	15	100	78	185	W20FT370	WN6B
20	.5	5.6	3.9	15	100	78	225	W20FT560	WN6A

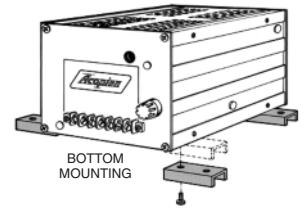
Nominal Output Voltage	Adjust Range ±V	Output Current Amps. at		Ripple mV (@ 25 MHz BW)		Effic. (Typ.) %	(\$ Price	Model	Case Size
		40°C	71°C	RMS	P-P				
22	.5	3.4	2.4	15	100	79	185	W22FT340	WN6B
22	.5	5.3	3.7	15	100	79	225	W22FT530	WN6A
24	.5	3.2	2.2	15	100	81	185	W24FT320	WN6B
24	.5	5	3.5	15	100	80	225	W24FT500	WN6A
25	.5	3	2.1	15	100	81	185	W25FT300	WN6B
25	.5	4.8	3.3	15	100	80	225	W25FT480	WN6A
26	.5	2.8	2	15	100	81	185	W26FT260	WN6B
26	.5	4.6	3.2	15	100	80	225	W26FT460	WN6A
28	.5	2.7	1.9	15	100	81	185	W28FT270	WN6B
28	.5	4.2	2.9	15	100	80	225	W28FT420	WN6A
30	.5	2.5	1.7	25	150	81	185	W30FT250	WN6B
30	.5	4	2.8	25	150	80	225	W30FT400	WN6A
32	1	2.3	1.6	25	150	81	185	W32FT230	WN6B
32	1	3.7	2.5	25	150	80	225	W32FT370	WN6A
34	1	2.2	1.5	25	150	81	185	W34FT220	WN6B
34	1	3.5	2.4	25	150	80	225	W34FT350	WN6A
36	1	2.1	1.4	25	150	81	185	W36FT210	WN6B
36	1	3.3	2.3	25	150	80	225	W36FT330	WN6A
38	1	2	1.4	25	150	81	185	W38FT200	WN6B
38	1	3.1	2.2	25	150	80	225	W38FT310	WN6A
40	1	1.9	1.3	25	150	82	185	W40FT190	WN6B
40	1	3	2.1	25	150	81	225	W40FT300	WN6A
42	1	1.8	1.2	25	150	82	185	W42FT180	WN6B
42	1	2.8	1.9	25	150	81	225	W42FT280	WN6A
45	1	1.7	1.2	25	150	82	185	W45FT170	WN6B
45	1	2.6	1.8	25	150	81	225	W45FT260	WN6A
48	1	1.6	1.1	25	150	82	185	W48FT160	WN6B
48	1	2.5	1.7	25	150	81	225	W48FT250	WN6A





WALL MOUNTING KITS ...\$10

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

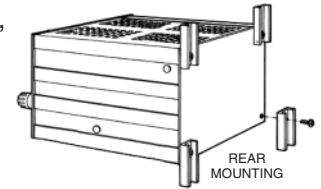


For Gold Box and modular High Voltage power supplies:

GB8 Mounting Kit (#8-32 mounting holes)

Can be used on these case sizes:

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



For Narrow Profile power supplies:

NP6 Mounting Kit (#6-32 mounting holes)

Can be used on these case sizes:

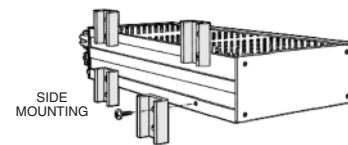
AMC, CN8T, DN6B, DN6A, DN8A, DN8, F6T, F8T, N8T, WL9, WN6A, WN6B, WN8, WN8A, TN6T

NP6L Mounting Kit (#6-32 mounting holes)

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

Can be used on these case sizes:

CN8H, N8H, TN8H

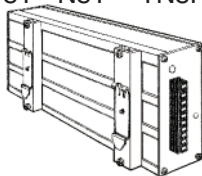


DIN RAIL MOUNTING KITS ...\$15

NPH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes:

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

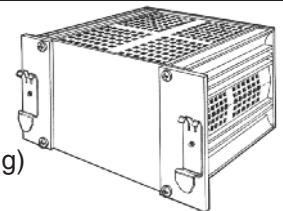


GR35DIN Mounting Kit (Rear mounting)

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						

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



NPV35DIN Mounting Kit (Vertical mounting)

Can be used on these case sizes:

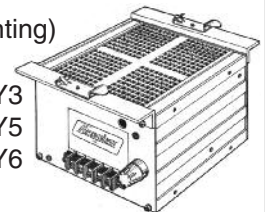
CN8H	DN6A	F6T	N8H	TN6T	WN6A
CN8T	DN6B	F8T	N8T	TN8H	WN6B
	DN8				WN8
	DN8A				WN8A



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				



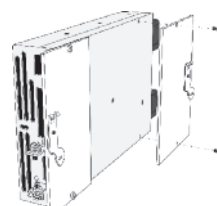
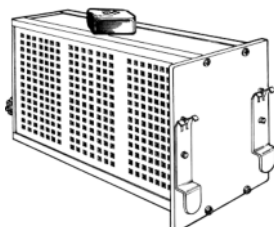
WL35DIN Mounting Kit (Vertical mounting)

Can be used on these case sizes: WL7, WL9

NPR35DIN Mounting Kit (Rear mounting)

Can be used on these case sizes:

CN8H	F6T	N8H	TN6T
CN8T	F8T	N8T	TN8H



WLH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes: WL7, WL9

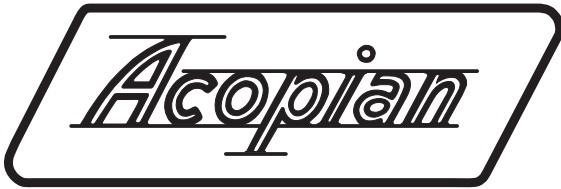
CH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes: RM6, RW6

WH35DIN Mounting Kit (Horizontal mounting)

Can be used on these case sizes: WM6, WM9





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.

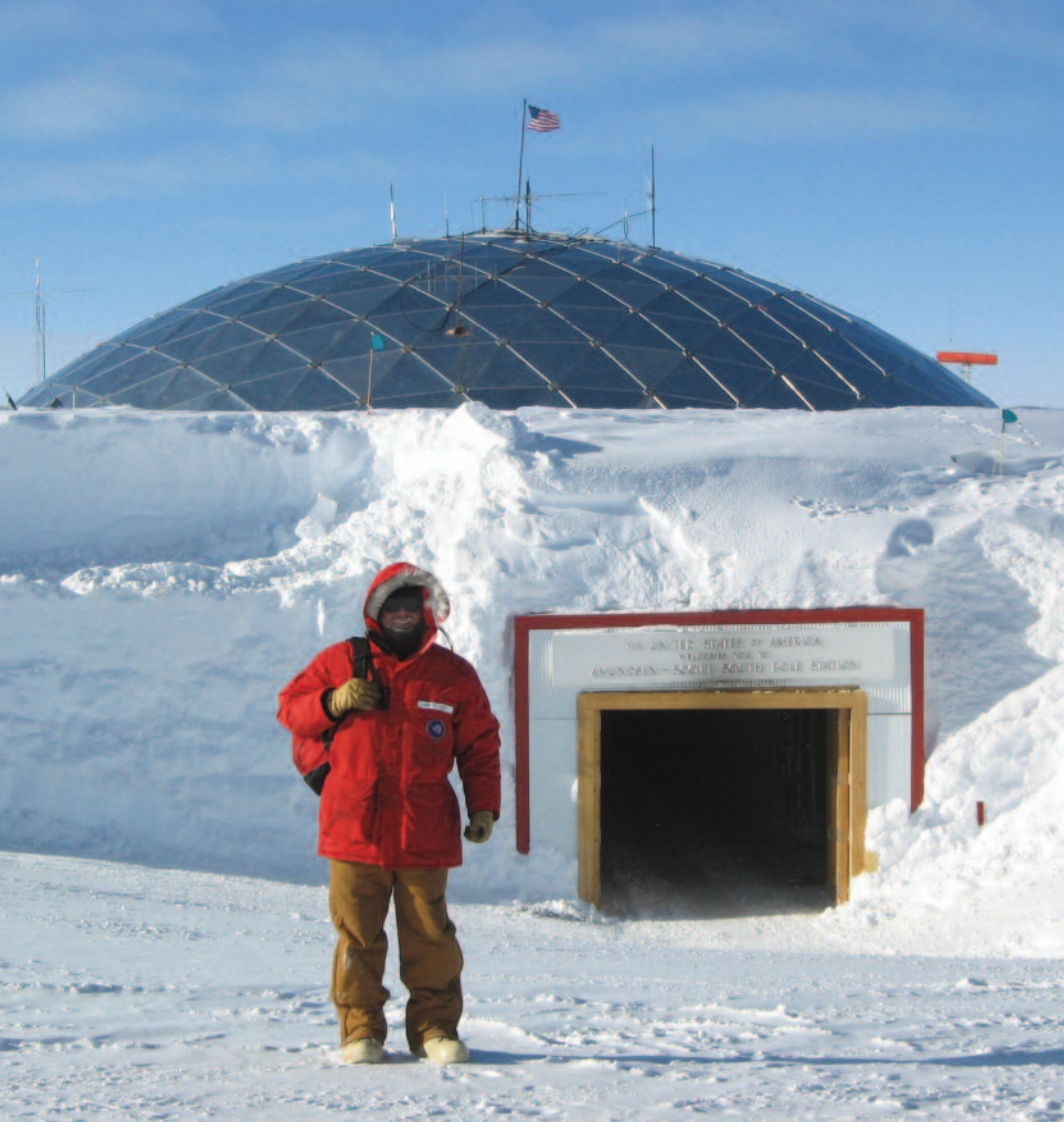


PHOTO COURTESY OF THE ICECUBE PROJECT

“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)

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