

## PowerModule™ PM1000 System Developer Kits (SDK)

RATINGS AND APPLICATION SOFTWARE							ORDERING INFORMATION					
TYP. V <sub>AC</sub>	MAX. V <sub>DC</sub>	COOLING	INCLUDED APPLICATION SOFTWARE	MAX./ POLE I <sub>NOM.(AC)</sub>	DC BUS I <sub>MAX.(DC)</sub> ①	RATED FREQ.	PM1000	KIT NUMBER	ORDER QTY.	UNIT PRICE	EXT. PRICE	
<b>690V<sub>AC</sub></b>	<b>1100V<sub>DC</sub></b>	<b>AIR</b> (T <sub>INLET</sub> = 50°C)	ACTIVE RECTIFIER	140A	185A	f = 4 kHz	3-Pole	PM1175-6A2SDK		X \$23,750	=	
			DC - DC	90A	280A	f = 3 kHz						
			AC VOLTAGE SOURCE	140A	185A	f = 4 kHz	6-Pole	PM1350-6A2SDK		X \$34,600	=	
		<b>LIQUID</b> (T <sub>INLET</sub> = 65°C)	ACTIVE RECTIFIER	160A	215A	f = 4 kHz	3-Pole	PM1175-6L2SDK		X \$23,750	=	
			DC - DC	110A	330A	f = 3 kHz						
			AC VOLTAGE SOURCE	160A	215A	f = 4 kHz	6-Pole	PM1350-6L2SDK		X \$34,600	=	
<b>480V<sub>AC</sub></b>	<b>900V<sub>DC</sub></b>	<b>AIR</b> (T <sub>INLET</sub> = 50°C)	ACTIVE RECTIFIER	210A	255A	f = 8 kHz	3-Pole	PM1175-4A2SDK		X \$23,750	=	
			DC - DC	140A	425A	f = 6 kHz						
			AC VOLTAGE SOURCE	210A	255A	f = 8 kHz	6-Pole	PM1350-4A2SDK		X \$34,600	=	
		<b>LIQUID</b> (T <sub>INLET</sub> = 65°C)	ACTIVE RECTIFIER	245A	305A	f = 8 kHz	3-Pole	PM1175-4L2SDK		X \$23,750	=	
			DC - DC	165A	500A	f = 6 kHz						
			AC VOLTAGE SOURCE	245A	305A	f = 8 kHz	6-Pole	PM1350-4L2SDK		X \$34,600	=	
							<b>TOTAL</b>					

① DC bus rating is per 3-pole PM1000 and can be 2x for 6-pole PM1000.

### ADDITIONAL PM1000 POWER CONVERTERS

<b>690V<sub>AC</sub></b>	<b>1100V<sub>DC</sub></b>	<b>AIR</b>	same ratings as above	3-Pole	PM1175-6A2DDD00000		X \$15,700	=
			same ratings as above	6-Pole	PM1175-6A2DDD00DDD		X \$26,550	=
		<b>LIQUID</b>	same ratings as above	3-Pole	PM1175-6L2DDD00000		X \$15,700	=
			same ratings as above	6-Pole	PM1175-6L2DDD00DDD		X \$26,550	=
<b>480V<sub>AC</sub></b>	<b>900V<sub>DC</sub></b>	<b>AIR</b>	same ratings as above	3-Pole	PM1175-4A2DDD00000		X \$15,700	=
			same ratings as above	6-Pole	PM1175-4A2DDD00DDD		X \$26,550	=
		<b>LIQUID</b>	same ratings as above	3-Pole	PM1175-4L2DDD00000		X \$15,700	=
			same ratings as above	6-Pole	PM1175-4L2DDD00DDD		X \$26,550	=

### OPTIONS

#### PM1000 controller auxiliary power supply (CAPS)

PROVIDES POWER TO THE PM1000 CONTROLLER WITHOUT DC BUS VOLTAGE APPLIED. REQUIRES 24VDC. INCLUDED ON PM1000 IN SDK.

3-Pole  
or  
6-Pole  
PM1000-24

X \$825 =

**INSTRUCTIONS**

1. FILL IN THE ORDER QUANTITY AND EXT. PRICE COLUMNS.
2. FILL IN THE TOTAL AMOUNT.
3. FILL IN THE PURCHASE ORDER NUMBER FOR THE TOTAL AMOUNT.
4. COMPLETE REQUESTOR INFORMATION.
5. REVIEW TERMS AND CONDITIONS OF SALE (SHEET 2).
6. FAX THE COMPLETED FORM AND A COPY OF THE PURCHASE ORDER TO (262) 901-0104.

PURCHASE ORDER NUMBER:

#### REQUESTOR INFORMATION

NAME: \_\_\_\_\_

COMPANY: \_\_\_\_\_

PHONE: \_\_\_\_\_

E-Mail: \_\_\_\_\_

FOR QUESTIONS CONTACT PM1000 SALES ASSISTANCE AT (800) 272-2755.

## TERMS AND CONDITIONS OF SALE

1. Warranties: AMSC warrants to Purchaser that products and any services furnished hereunder will be free from defects in material, workmanship and title and will be of the kind and quality specified in AMSC's written quotation. The foregoing shall apply only to failures to meet said warranties (excluding any defects in title) which appear within one year from the date of shipment hereunder; provided, however, that if Purchaser, in the course of its regular and usual business, transfers title to or leases such products (including equipment incorporating such products) to a third party, such period shall run until one year from such transfer or lease or eighteen months from shipment by AMSC, whichever occurs first.

The conditions of any tests shall be mutually agreed upon and AMSC shall be notified of, and may be represented at, all tests that may be made. The warranties and remedies set forth herein are conditioned upon (a) proper storage, installation, use and maintenance, and conformance with any applicable recommendations of AMSC and (b) Purchaser promptly notifying AMSC of any defects and, if required, promptly making the product available for correction.

If any product or service fails to meet the foregoing warranties (except title), AMSC shall thereupon correct any such failure either at its option, (i) by repairing any defective or damaged part or parts of the products, or (ii) by making available, F.O.B. AMSC's plant or other point of shipment, any necessary repaired or replacement parts. Where a failure cannot be corrected by AMSC's reasonable efforts, the parties will negotiate an equitable adjustment in price.

The preceding paragraph sets forth the exclusive remedies for claims (except as to title) based on defect in or failure of products or services, whether the claim is in contract, indemnity, warranty, tort (including AMSC's negligence), strict liability or otherwise and however instituted. Upon the expiration of the warranty period, all such liability shall terminate and Purchaser shall have a reasonable time, within thirty days after the warranty period, to give written notice of any defects which appeared during the warranty period. Except as set forth in Article 2, "Patents", the foregoing warranties are exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. NO IMPLIED STATUTORY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY. AMSC does not warrant any products or services of others which Purchaser has designated.

2. Patents: (a) Subject to the provisions of this Article, AMSC warrants that products furnished hereunder, and any part thereof, shall be delivered free of any rightful claim of any third party for infringement of any United States patent. If notified promptly in writing and given authority, information and assistance and contingent upon Purchaser not taking any position adverse to AMSC in connection with such claim, AMSC shall defend, or may settle, at its expense, any suit or proceeding against Purchaser so far as based on a claimed infringement which would result in a breach of this warranty and AMSC shall pay all damages and costs awarded therein against Purchaser due to such breach. In case any product or part thereof is in such suit held to constitute such an infringement and the use for the purpose intended of said product or part is enjoined or in AMSC's opinion the product is likely to constitute infringement or the use of the product is likely to be enjoined, AMSC shall, at its expense and option, either procure for Purchaser the right to continue using said product or part, or replace same with a noninfringing product or part, or modify same so it becomes noninfringing, or remove the product and refund the purchase price (less reasonable depreciation for any period of use) and any transportation costs separately paid by Purchaser. The foregoing states the entire liability of AMSC for patent infringement by said products or any part thereof.

(b) The preceding paragraph shall not apply to any product or part specified by Purchaser or manufactured to Purchaser's design, or to the use of any product furnished hereunder in conjunction with any other product in a combination not furnished by AMSC as a part of this transaction. As to any such product, part, or use in such combination, AMSC assumes no liability whatsoever for patent infringement and Purchaser will hold AMSC harmless against any infringement claims arising therefrom.

3. Delivery, Title and Risk of Loss: Delivery dates are approximate and are based upon prompt receipt of all necessary information from Purchaser. Unless otherwise specified by AMSC, delivery will be made and title will pass F.O.B. point of shipment to Purchaser. Risks of loss or damage pass to Purchaser on delivery.

4. Excusable Delays: AMSC shall not be liable for delays in delivery or performance, or for failure to manufacture, deliver or perform, due to (i) a cause beyond its reasonable control, or (ii) an act of God, act of Purchaser, act of civil or military authority, Governmental priority, strike or other labor disturbance, flood, epidemic, war, riot delay in transportation or car shortage, or (iii) inability on account of a cause beyond the reasonable control of AMSC to obtain necessary materials, components, services or facilities. AMSC will notify Purchaser promptly of any material delay excused by this Article and will specify the revised delivery date as soon as practicable. In the event of any such delay, there will be no termination and the date of delivery or of performance shall be extended for a period equal to the time lost by reason of the delay. In the event of an unexcused and material delay, the parties will mutually agree to an equitable solution.

5. Payments and Financial Conditions: Except to the extent otherwise specified by AMSC in its quotation, pro rata payments shall become due without setoff as shipments are made. If AMSC consents to delay shipments after completion of any product, payment shall become due on the date when AMSC is prepared to make shipment. In the event of any such delay, title shall pass and products shall be held at Purchaser's risk and expense.

Any order for products by Purchaser shall constitute a representation that Purchaser is solvent. In addition, upon AMSC's request, Purchaser will furnish a written representation concerning its solvency at any time prior to shipment.

If Purchaser's financial condition at any time does not justify continuance of the work to be performed by AMSC hereunder on the agreed terms of payment, AMSC may require full or partial payment in advance. In the event of Purchaser's bankruptcy or insolvency or in the event any proceeding is brought against Purchaser, voluntarily or involuntarily, under the bankruptcy or any insolvency laws, AMSC shall be entitled to cancel any order then outstanding at any time during the period allowed for filing claims against the estate and shall receive reimbursement for its proper cancellation charges. AMSC's rights under this Article are in addition to all rights available to it at law or in equity.

6. Disclosure of Information: Any information, suggestions or ideas transmitted by Purchaser to AMSC in connection with performance hereunder are not to be regarded as secret or submitted in confidence except as may be otherwise provided in writing signed by a duly authorized representative of AMSC.

7. Taxes: In addition to any price specified herein, Purchaser shall pay the gross amount of any present or future sales, use, excise, value added, or other similar tax applicable to the price, sale or delivery of any products or services furnished hereunder or to their use by AMSC or Purchaser, or Purchaser shall furnish AMSC with evidence of exemption acceptable to the taxing authorities.

8. Limitations of Liability and Indemnities: (a) Subject to the other provisions of this Article, AMSC agrees to indemnify and save harmless Purchaser from and against any loss expense or claim asserted by third parties for damage to third party tangible property, or for bodily injury, or both, arising out of the performance of this agreement, to the extent such damage or injury is attributable to the negligence of AMSC; provided that Purchaser gives AMSC prompt notice of any such claim and all necessary information and assistance so that AMSC, at its option, may defend or settle such claim and Purchaser does not take any adverse position in connection with such claim. In the event that any such damage or injury is caused by the joint or concurrent negligence of AMSC and Purchaser, the loss, expense or claim shall be borne by AMSC and Purchaser in proportion to their negligence.

(b) Except as provided in Article 2, "Patents", in no event, whether as a result of breach of contract, indemnity, warranty, tort (including AMSC's negligence), strict liability or otherwise, shall AMSC's liability to Purchaser or its insurers for any loss or damage arising out of, or resulting from this agreement, or from its performance or breach, or from the products or services furnished hereunder, exceed the price of the specific product or service which gives rise to the claim, and except as to title, any such liability shall terminate upon the expiration of the warranty period specified in Article 1, "Warranties". Any such claim of liability must be timely commenced in a court of competent jurisdiction in accordance with the applicable statute of limitations and/or of repose, but in no event later than one year from the termination of the warranty period.

(c) In no event, whether as a result of breach of contract, indemnity, warranty, tort (including AMSC's negligence), strict liability or otherwise, shall AMSC be liable for any special, consequential, incidental or penal damages including, but not limited to, loss of profit or revenues, loss of use of the products or any associated equipment, damage to associated equipment, cost of capital, cost of substitute products, facilities, services or replacement power, downtime costs, or claims of Purchaser's customers for such damages. If the products or services being provided by AMSC will be furnished by the Purchaser to a third party by contract or otherwise or relate to a contract between the Purchaser and a third party, the Purchaser shall obtain from such third party a provision affording AMSC the protection of this Article, except for paragraph (a).

(d) If AMSC furnishes Purchaser with advice or other assistance which concerns any product supplied hereunder or any system or equipment in which any such product may be installed and which is not required pursuant to this agreement, the furnishing of such advice or assistance will not subject AMSC to any liability, whether in contract, indemnity, warranty, tort (including AMSC's negligence), strict liability or otherwise. For the purposes of paragraphs (b), (c) and (d) of this Article, the term AMSC includes the AMSC's subcontractors and suppliers.

(e) Unless otherwise agreed in writing by a duly authorized representative of AMSC, products sold hereunder are not intended for use in connection with any nuclear facility or activity. If so used, the provisions of the Rider For Nuclear Applications (below) will apply.

9. Software: Software furnished pursuant to AMSC's quotation shall be provided pursuant to AMSC's standard software license agreement, the terms and conditions of which shall take precedence over these Conditions of Sale with respect to the provision of such software.

10. General: Any products delivered by AMSC hereunder will be produced in compliance with the Fair Labor Standards Act of 1938, as amended and applicable. AMSC will comply with applicable federal, state and local laws and regulations as of the date of any quotation which relate to (i) non segregated facilities and equal employment opportunity (including the seven paragraphs appearing in Section 202 of Executive Order 11246, as amended), (ii) workers' compensation, and (iii) the production in AMSC's manufacturing facilities of products furnished hereunder. Price and, if necessary, delivery will be equitably adjusted to compensate AMSC for the cost of compliance with any other laws or regulations.

The delegation or assignment by Purchaser of any or all of its duties or rights hereunder without AMSC's prior written consent shall be void.

Any representation, warranty, course of dealing or trade usage not contained or referenced herein will not be binding on AMSC. These Conditions of Sale contain the entire and only agreement between the Purchaser and AMSC respecting the terms and conditions and supersedes and cancels all previous negotiations, agreements, commitments, representations and writings in respect thereto. The Conditions of Sale may not be amended, supplemented, changed or modified in any manner, orally or otherwise, except by an instrument in writing of concurrent or subsequent date, signed by a duly authorized representative of each party.

The validity, performance and all matters relating to the interpretation and effect of this agreement and any amendment hereto shall be governed by the law of the State of New York, excluding its conflict of law rules. The invalidity, in whole or part, of any of the articles or paragraphs in this Conditions of Sale will not affect the remainder of such article or paragraph or any other article or paragraph.

The provisions of this agreement are for the benefit of the parties hereto and not for any other person except as specifically provided herein.

### RIDER FOR NUCLEAR APPLICATIONS

If any products sold hereunder are used in connection with any nuclear facility or activity, AMSC and its suppliers shall have no liability to Purchaser or its insurers for any nuclear damage or contamination and Purchaser shall indemnify AMSC against any such liability, whether as a result of breach of contract, indemnity, warranty, tort (including AMSC's negligence), strict liability or otherwise. The indemnity in Article 8(a) above shall not apply to any damages or bodily injury, or both, arising out of a "nuclear incident", as that term is defined in the Atomic Energy Act of 1954, as amended (the "Act"). In addition, Purchaser shall furnish financial protection as required by Section 170 of the Act, including an agreement of indemnification and/or nuclear liability insurance from ANI and MAELU, or both, pursuant to Section 170 of the Act, as applicable. Purchaser shall not remove any items of equipment from the plant site or otherwise transfer any interest therein without first providing AMSC with written assurance of limitation of and protection against liability (both nuclear and non nuclear) following the proposed removal or transfer at least equivalent to that afforded to AMSC and its suppliers under Article 8 above. Removal or transfer contrary to this provision shall, in addition to any other legal or equitable rights of AMSC, make Purchaser the indemnitor of AMSC and its suppliers to the same extent that they would have been protected had no such removal or transfer taken place. Any AMSC's material or equipment which becomes radioactive at the work site, shall, at AMSC's option, be purchased by Purchaser. Any nuclear decontamination necessary for AMSC's performance (including warranty) shall be performed by Purchaser without cost to AMSC.