



WARRANTY

WARRANTY I —GENERAL PROVISIONS

Microwave Power Products, Inc. (MPP), warrants its Products, Software, and Services according to these general warranty provisions and the provisions of Warranty II —Supplemental Provisions as applicable to specific Products.

GENERAL LIMITED WARRANTY

MPP warrants products, parts, and accessories manufactured and sold by MPP (“Products”) and firmware and software media furnished by MPP in or for use with Products (“Software”) to be free from defects in material and workmanship and in substantial compliance with operational features of published MPP specifications at the time of sale. MPP makes no warranty that the operation of any Software will be uninterrupted or error free. MPP’s warranty for services provided by MPP in connection with Products (“Services”) shall be as stated in MPP terms and conditions of service for specific Products.

WARRANTY PERIODS

MPP’s warranty shall begin upon shipment from MPP and continue for the periods specified in Warranty II, or as stated on MPP’s quotation, or as agreed to in writing by MPP under the conditions stated in Warranty I and Warranty II.

WARRANTY REMEDIES

Buyer’s sole and exclusive remedy under warranty shall be repair or, at MPP’s option, replacement of defective Products, parts, accessories, or Software. If, in MPP’s opinion, such repair or replacement is not feasible, or if such remedy fails its essential purpose, MPP may refund or credit a portion of any sum paid by Buyer for the Product, Software, or Service. In-warranty repair or replacement parts are warranted only for the unexpired portion of the original warranty period.

GENERAL EXCLUSIONS FROM COVERAGE

MPP’s warranties shall not apply to the extent that malfunction is caused, in MPP’s reasonable opinion, by (1) accident, abuse, alteration, misuse, or neglect; (2) failure to use Products under normal operating conditions or environment, or within MPP-specified ratings, or according to any operating conditions provided by MPP; (3) lack of routine care or maintenance as indicated in any MPP operating or maintenance instructions; (4) failure to use or take any proper precautions under the circumstances; (5) user modification of any Product or Software; or (6) latent defects discovered after expiration of the applicable warranty period. Additional exclusions from coverage may apply to specific MPP Products. If these exclusions apply and the unit has been returned by the Buyer for test and evaluation, or if MPP is unable to duplicate the failure for which the Product was returned, an Evaluation and Test fee may be charged to the Buyer.

OTHER SUPPLIER WARRANTIES

Warranties given by other suppliers of equipment, accessories, components, or computer software not owned by MPP but incorporated by MPP on or into Products are passed on to Buyer and shall apply only to the equipment, accessories, components, or computer software of which they are a part. MPP shall have no liability under warranties provided by other suppliers, nor shall MPP have any liability for failure of other suppliers to perform under their

warranty. MPP’s liability under warranty shall be determined solely by MPP’s warranty, including all its exclusions and limitations.

EXCLUSION OF IMPLIED WARRANTIES

This limited warranty is expressly in lieu of and EXCLUDES all other express or implied warranties, including, but not limited to, warranties of MERCHANTABILITY and of FITNESS for a particular purpose, use, or application.

LIMITATIONS ON DAMAGES AND LIABILITY

MPP’s TOTAL LIABILITY IN DAMAGES OR OTHERWISE SHALL NOT EXCEED THE PAYMENT, IF ANY, RECEIVED BY MPP FOR THE UNIT OF PRODUCT, SERVICE, OR SOFTWARE FURNISHED, OR TO BE FURNISHED, RESULTING IN THE LOSS OR DAMAGE CLAIMED. IN NO EVENT SHALL MPP BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR SPECIAL LOSS OR DAMAGES OF ANY KIND, SUCH AS, BUT NOT LIMITED TO, LOST BUSINESS REVENUE, LOST PROFITS OR COSTS OF DOWNTIME RESULTING FROM MPP’S PRODUCTS, SERVICES, OR SOFTWARE, HOWEVER CAUSED, WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER LEGAL THEORY.

Liability to third parties for bodily injury, including death, resulting from MPP’s performance or Products shall be determined according to applicable law. Patent-infringement liability shall be determined solely according to the “Patents and Other Intellectual Property Rights Infringement” provision (Paragraph 8 of MPP’s “Terms and Conditions of Sale”). No claims, regardless of form, arising out of or in any way connected with Products, Software, or Services furnished by MPP, may be brought by Buyer more than 1 year after the cause of action has accrued or MPP’s performance has been completed or terminated, whichever is earlier.

WARRANTY II —SUPPLEMENTAL PROVISIONS

Microwave Power Products, Inc. (MPP) warrants its Microwave Vacuum Electron Devices (VEDs) or (“Products”) according to MPP Warranty I — General Provisions and the following supplemental provisions. In case of conflict with MPP Warranty I —General Provisions, the following shall govern:

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MPP warrants the Products it manufactures to be free from defects in material and workmanship and to be in substantial compliance with operational features of MPP’s published specifications at the time of sale. MPP’s warranty shall continue for the period of time specified on MPP’s quotation or agreed to in writing by MPP according to the agreed-upon Warranty Code (see the Warranty Code Table below). If no period is stated, the warranty is limited to 30 days from the date of shipment from MPP. When one of the Warranty Codes is stated in MPP’s quotation, the price includes the warranty coverage specified. Warranties, other than as specified by MPP in its quotation, may be purchased for an additional charge. Warranty for repairs shall be limited to material and workmanship on the repaired and/or replaced portion of the product.



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WARRANTY CODE TABLE

Klystron/Gyrotron and Coupled-Cavity TWT Products

Warranty Code	Full-Coverage Warranty Period		Pro Rata and Maximum Warranty Period	
	Hours	Months	Hours	Months
W-U	Unlimited	12	Unlimited	12
W-1000	100	1	1,000	12
W-2000	100	1	2,000	12
W-5000	100	1	5,000	12
W-7500	100	1	7,500	24
W-10,000	100	1	10,000	36
W-20,000	100	1	20,000	60
W-12	Unlimited	1	Unlimited	12
W-18	Unlimited	1	Unlimited	18
W-24	Unlimited	1	Unlimited	24
W-36	Unlimited	1	Unlimited	36

Helix TWT and Transmitter Products

Warranty Code	Full-Coverage Warranty Period		Pro Rata and Maximum Warranty Period	
	Hours	Months	Hours	Months
WP-12	Unlimited	3		9
WP-24	Unlimited	12		12
WU-12	Unlimited	12		
WU-24	Unlimited	24		

Power-Grid and Magnetron Products and Components

Warranty Code	Months from Shipment by Power Grid	Months from Delivery to User	Filament or Heater On-Time Hours
X***	24*	24	---
T	36*	24	10,000
U	24*	18	3,000
V	30*	24	7,000
R	24*	12	5,000
P	24*	12	4,000
N	24*	12	3,000
K	24*	12	1,000
L	Life tested at factory in lieu of Warranty (Jan)		
12**	24*	12	Not Applicable

* An Original Equipment Manufacturer (OEM) or a MPP authorized distributor may hold power tubes in stock for the difference between the "shipment by MPP" period and the "delivery to user" period, and the user still receives full warranty. For example, the warranty period for Warranty Code T is 24 months from the date of delivery to user, 36 months from the date of shipment from MPP's factory, or 10,000 hours of filament on-time, whichever elapses first.

** Standard warranty for hardware and accessories only.

*** Warranty Code X has no pro rata period.

REMEDIES

If MPP's examination confirms that a Product has failed because of defects in workmanship or materials during the warranty period through no fault of the Customer, the Customer's sole and exclusive remedy shall be according to one of the following:

1. Full Coverage. If failure occurs during the full-coverage portion of the warranty period, MPP will, at MPP's option and at no cost to the Customer, either repair or replace the Product or refund the original purchase price upon return of the failed product to MPP.

2. Pro Rata Coverage. If failure occurs after the Full-Coverage Period and within the pro rata portion of the warranty period, subject to the maximum hours of filament or heater operation or the maximum number of months after shipment specified above, MPP will, at MPP's option, either (1) refund the pro rata portion of the purchase price or (2) apply such pro rata amount as a credit on a replacement order for a new Product. Any refund or credit shall be determined by the lesser result of either of the following:

$$\text{Amount} = \left(\frac{\text{MWH} - \text{Total Operating Hours}}{\text{MWH}} \right) \times \text{AP}$$

$$\text{Amount} = \left(\frac{\text{MWM} - \text{Months After Shipment}}{\text{MWM}} \right) \times \text{AP}$$

Where MWH = Maximum Warranty Period (Hours)
MWM = Maximum Warranty Period (Months)
AP = Applicable Price

WARRANTY CONDITIONS

All remedies are expressly conditioned as follows:

1. Only MPP authorized personnel may make repairs to and adjustments of Products. Unauthorized repairs or adjustments will void this warranty.
2. The Product must have been used under normal operating conditions within the respective MPP-specified ratings and according to MPP operating instructions. MPP shall make the sole final determination as to whether failure occurred in normal operation (under warranty) or whether the Product was subjected to other than normal operation (excluded from warranty).
3. The Customer must give MPP written notice of Product failure before the end of the Product warranty period. MPP shall determine probable hours of Product usage when no accurate records can be found.
4. The Customer must return the failed Product and a completed "Returned Product Form" (MPP Pub. 3188) within 45 days following its written notice of failure.
5. The Warranty Period remaining on the date MPP received notice of failure shall apply to the repaired or replaced Product from the date of reshipment to the Customer. Only Products shipped as paid replacements shall have a new Warranty.
6. The Customer shall be responsible for and shall immediately file claims against the carrier in cases of loss or damage to Products during either the initial shipment to the Customer or the Customer's return to MPP for repair or replacement.
7. MPP shall have no warranty obligation other than as specified by the Warranty Code on MPP's quotation. If "No Warranty" is specified, MPP makes no express or implied warranties and disclaims MERCHANTABILITY and FITNESS for any particular purpose, use, or application, and the Customer releases MPP from any warranty liability whatsoever.



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8. All obligations of MPP under this warranty shall cease, and no adjustment, credit, or refund shall be made with respect to any liquid-cooled Product in which any liquid coolant has been allowed to remain after removal of the Product from operation.

WARNING: Liquid coolant remaining in the cooling passages may freeze while the Product is in storage or transit and may damage the Product beyond repair. All liquid coolant must be blown out of the Product coolant passages by the Customer immediately after removal from operation.

9. Subject to the "Warranty Replacement and Adjustment" provisions (Paragraph 10 of MPP's "Terms and Conditions of Sale"), the following WARRANTY RETURN PROCEDURES apply:

- A. Before initiating return procedures, determine that the Product is itself faulty. Please call the local MPP Field Office for assistance in determining the problem and in obtaining satisfactory performance from the Product. This may save

shipping time and expense and may minimize equipment downtime.

- B. If examining the Product confirms that the Product is faulty: (1) complete the Returned Product Form (available in MPP's Document Library: <http://www.cpii.com/library.cfm/1#20>) by entering all requested data and describing fully what happened when the failure occurred to help establish the cause of failure and expedite adjustment or repair; (2) ship the Product, freight prepaid, on a shipping-memo basis only, and do not issue debit memos until advised by MPP of final disposition; and (3) return the Product via a means of transportation acceptable to MPP. MPP reserves the right to reject any warranty claim on any Product returned without a Returned Product Form, any Product that has been altered, or any Product that has been shipped by an unacceptable means of transportation. Return Products in their original container to the address indicated on the Returned Product Form referred to in #4 above.