

# DuraComm<sup>®</sup>

A MISSION CRITICAL ELECTRONICS BRAND

## Owners Manual

RMI-400W-1U

400W Rackmount -48VDC to 120VAC Inverter

M-RMI-400W-1U 051123



MCE NETWORK & INDUSTRIAL POWER



DuraComm<sup>®</sup>

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## Features

- True-sine wave output
- Wide operating temp range
- 4 NEMA 5-20R AC receptacles (1 front, 3 rear)
- Standard 19" 1U Rackmount
- Built-in protection
  - Input – reverse polarity/DC low alarm/DC low shutdown/over voltage
  - Output – short circuit/overload/over temperature



## Specifications

Model	RMI-400W-1U
<b>Electrical</b>	
Output Voltage	120 VAC
Output Frequency	50/60 ±0.1 Hz
Maximum Power	400 W
Waveform	True sine wave (THD <3%)
Input Voltage Range	-40 to -66 VDC
Nominal Input Voltage	-48 VDC
Efficiency	93%
Input Current	10 A
Inline Fuse	10A x2
<b>Environmental</b>	
Working Temperature Range	-20 to +70°C
Working Humidity	20-90% RH non-condensing
Storage Temperature Range	-30 - *70°C
Storage Humidity	10-95% RH non-condensing
Vibration	10-500hz, 3G 10min/1 cycle, 60 min each along X, Y, Z axis
<b>Mechanical</b>	
Length	13"
Width	19"
Height	1.75"

Model		RMI-400W-1U
Weight	6 Lbs.	
Safety & EMC		
Safety Standards	CB IEC62368	
Withstand Voltage	DC I/P - AC O/P:3.0KVAC AC O/P - FG:1.5KVAC	
<b>EMC Emission</b>		
<b>Parameter</b>	<b>Standard</b>	<b>Test Level</b>
Radiated	FCC	Test Level Class A
Harmonic Current	BS/EN61000-3-2	
Voltage Flicker	BS/EN6100-3-3	
EMC Immunity		
BS EN/EN55024, BS EN/EN55035		
<b>Parameter</b>	<b>Standard</b>	<b>Test Level</b>
ESD	BS/EN6100-4-2	Level 4, 15KV air; Level 4, 9KV contact
Radiated	BS/EN6100-4-3	Level 3, 10 V/m
Magnetic Field	BS/EN6100-4-8	Level 4, 30A/m

\*NOTE: Specifications are subject to change without notice.

## Important Safety Instructions

**THESE INSTRUCTIONS ARE INTENDED FOR USE BY A TECHNICIAN FAMILIAR WITH ELECTRONIC PRODUCTS.**

**WARNING:** There are no user serviceable parts inside. Service must be referred to a qualified factory technician or factory trained technician. DO NOT operate the unit in a hot, enclosed environment or compartment. Be sure adequate ventilation for cooling is provided since heat buildup will shorten component life.

**NOTE:** The individual user should take care to determine prior to use or installation whether this device is suitable, adequate, and safe for the use intended. Since individual applications are subject to numerous variations, DuraComm makes no representation or warranty as to the merchantability, suitability, or fitness of these units for any specific application.

## Product Overview

Provide seamless back-up power for AC powered communications equipment from the site's 48 VDC power system.

## Installation

DO NOT block any of the cooling vents on the sides and/or cooling fan. Always allow adequate ventilation by not installing the unit inside tightly closed spaces.

## Front Panel Layout



## Rear Panel Wiring

AC Terminal x3

## Conductor Pre-treatment

All kinds of copper conductors can be clamped without treatment. DO NOT solder tin stranded conductors. The solder yields and fractures under high pressure. The result is increased contact resistance and excessive temperature rise. Additionally, corrosion has been observed due to the fluxes. Notch fractures at the transition from the rigid tinned part to the flexible conductors are also possible. Ferrules can be used as a protection when wiring stranded conductors. Copper ferrules prevent the current transfer from being influenced by dissimilar metals and remove the risk of corrosion. Always use the correct tool to crimp the ferrule.

## RECOMMENDED COPPER WIRE SIZE FOR CURRENT CAPACITY

*(Insulated Wire, Single Conductor in free air)*

Current Level in Amperes	Wire Size
<7 AMPERES	20 AWG Up to 5 feet 18 AWG Up to 10 feet
14 AMPERES	18 AWG Up to 5 feet 16 AWG Up to 10 feet
20 AMPERES	16 AWG Up to 5 feet 14 AWG Up to 10 feet
30 AMPERES	14 AWG Up to 5 feet 12 AWG Up to 10 feet
40 AMPERES	12 AWG Up to 5 feet 10 AWG Up to 10 feet
50 AMPERES	10 AWG Up to 5 feet 8 AWG Up to 10 feet
70 AMPERES	8 AWG Up to 5 feet 6 AWG Up to 10 feet
100 AMPERES	6 AWG Up to 5 feet 4 AWG Up to 10 feet

## LIMITED WARRANTY

DuraComm warrants to the initial end user, each power supply manufactured by DuraComm to be free from defects in material and workmanship, when in normal use and service for a period of three years from the date of purchase, from an authorized DuraComm dealer.

Should a product manufactured by DuraComm fail or malfunction due to manufacturing defect, or faulty component, DuraComm, at its option, will repair or replace the faulty product or parts thereof, which, after examination by DuraComm, prove to be defective or not operational according to specifications in effect at the time of sale to the initial end user. The product that is replaced or repaired under the provisions of this warranty, will be warranted for the remainder of the original warranty period, only, and will not extend into a new three-year warranty period.

The limited warranty does not extend to any DuraComm product which has been subject to misuse, accidental damage, neglect, incorrect wiring not associated with manufacture, improper charging voltages, or any product which has had the serial number removed, altered, defaced, or changed in any way.

DuraComm reserves the right to change, alter, or improve the specifications of its products at any time, and by so doing, incurs no obligation to install or retrofit any such changes or improvements in or on products manufactured prior to inclusion of such changes.

DuraComm requires any product needing in or out of warranty service to be returned to DuraComm. All requests for warranty service must be accompanied by proof of purchase, such as bill of sale with purchase date identified. DuraComm is not responsible for any expenses or payments incurred for the removal of the product from its place of use, transportation, or shipping expenses to the place of repair, or return expenses of a repaired or replacement product to its place of use.

The implied warranties which the law imposes on the sale of this product are expressly LIMITED, in duration, to the three (3) year time period specified herein. DuraComm will not be liable for damages, consequential or otherwise, resulting from the use and operation of this product, or from the breach of this LIMITED WARRANTY.

Some states do not allow limitations on the duration of the implied warranty or exclusions or limitations of incidental or consequential damages, so said limitations or exclusions may not apply to you. This warranty gives you specific legal rights which vary from state to state.

This warranty is given in lieu of all other warranties, whether expressed, implied, or by law. All other warranties, including WITHOUT LIMITATION, warranties of merchantability and fitness or suitability for a particular purpose, are specifically excluded. DuraComm reserves the right to change or modify its warranty and service programs without prior notice.

## Contact Us

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