



## DRC Series

DRC-8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908  
DRC-8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918

INSTRUCTION  
SHEET

M3773/0102

---





**OMEGAnet® On-Line Service**  
<http://www.omega.com>

**Internet e-mail**  
[info@omega.com](mailto:info@omega.com)

**Servicing North America:**

**USA:** One Omega Drive, Box 4047  
Stamford, CT 06907-0047  
Tel: (203) 359-1660 FAX: (203) 359-7700  
e-mail: [info@omega.com](mailto:info@omega.com)

**Canada:** 976 Bergar  
Laval (Quebec) H7L 5A1  
Tel: (514) 856-6928 FAX: (514) 856-6886  
e-mail: [info@omega.ca](mailto:info@omega.ca)

**For immediate technical or application assistance:**

**USA and Canada:** Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA<sup>SM</sup>  
Customer Service: 1-800-622-2378 / 1-800-622-BEST<sup>SM</sup>  
Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN<sup>SM</sup>  
TELEX: 996404 EASYLINK: 62968934 CABLE: OMEGA

**Mexico and Latin America:** Tel: (001) 800-826-6342 FAX: (001) 203-359-7807  
En Español: (001) 203-359-7803 e-mail: [espanol@omega.com](mailto:espanol@omega.com)

**Servicing Europe:**

**Benelux:** Postbus 8034, 1180 LA Amstelveen, The Netherlands  
Tel: (31) 20 6418405 FAX: (31) 20 6434643  
Toll Free in Benelux: 0800 0993344  
e-mail: [nl@omega.com](mailto:nl@omega.com)

**Czech Republic:** ul. Rude armady 1868, 733 01 Karvina-Hranice  
Tel: 420 (69) 6311899 FAX: 420 (69) 6311114  
Toll Free: 0800-1-66342 e-mail: [czech@omega.com](mailto:czech@omega.com)

**France:** 9, rue Denis Papin, 78190 Trappes  
Tel: (33) 130-621-400 FAX: (33) 130-699-120  
Toll Free in France: 0800-4-06342  
e-mail: [france@omega.com](mailto:france@omega.com)

**Germany/Austria:** Daimlerstrasse 26, D-75392 Deckenpfronn, Germany  
Tel: 49 (07056) 3017 FAX: 49 (07056) 8540  
Toll Free in Germany: 0130 11 21 66  
e-mail: [info@omega.de](mailto:info@omega.de)

**United Kingdom:** One Omega Drive, River Bend Technology Centre  
ISO 9002 Certified Northbank, Irlam, Manchester  
M44 5EX, England  
Tel: 44 (161) 777-6611 FAX: 44 (161) 777-6622  
Toll Free in the United Kingdom: 0800-488-488  
e-mail: [info@omega.co.uk](mailto:info@omega.co.uk)

---

It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

**WARNING:** These products are not designed for use in, and should not be used for, patient-connected applications.

---

**WARRANTY/DISCLAIMER**

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal one (1) **year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY / DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

**RETURN REQUESTS/INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

©Copyright 1999 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

# Models DRC-8901 thru 8908 Isolated Transmitters

## 0 to 10 Volt Output

Model	DRC-8901	DRC-8902	DRC-8903	DRC-8904	DRC-8905	DRC-8906	DRC-8907	DRC-8908
<b>Input - DC</b>	0 - 50 mV	0 - 100 mV	0 - 5 V	0 - 10 V	0 - 100 V	4 - 20 mA	0 - 20 mA	0 - 50 mA
<b>Input Resistance</b>								
Voltage Input				1 Megohm				
Current Input				50 Ohms				
<b>Linearity, of Full Scale</b>				±0.02%				
<b>Accuracy, of Full Scale</b>				±0.1%				
<b>Maximum Input - No Damage</b>								
Voltage Input Models				130 VRMS				
Current Input Models				65 mA (3.25 Volts across 50 Ohm Input R)				
<b>Output</b>				0 -10 V				
Response Time, 10% to 90%				10 ms				
Ripple and Noise, of Full Scale				0.05%				
Load				5 mA				
Temp. Coefficient								
Zero				±0.5 mV/°C				
Full Scale				±100 ppm/°C				
<b>Power Requirements</b>								
Voltage				22 to 26 Volts DC				
Current				20 mA				
<b>Isolation, 3 Way</b>				700 VDC				
Power to Input or Output				15 pF				
Input to Output				750 pF				
60 Hertz CMRR				85 db				
<b>Environment</b>								
Operating				0°C to +55°C				
Storage				-40°C to +85°C				
<b>Size</b>	Plastic Case (UL-94V-1) with built in DIN Rail Foot			4.33"H x 0.895"W x 2.95"L (110 x 22.5 x 75 mm)				
<b>Weight</b>				5 oz. (142 grams)				
<b>Agency Approvals (pending)</b>				UL 508, UL 1604				

# Models DRC-8911 thru 8918 Isolated Transmitters

## 4 to 20mA Output

Model	DRC-8911	DRC-8912	DRC-8913	DRC-8914	DRC-8915	DRC-8916	DRC-8917	DRC-8918
<b>Input - DC</b>	0 - 50 mV	0 - 100 mV	0 - 5 V	0 - 10 V	0 - 100 V	4 - 20 mA	0 - 20 mA	0 - 50 mA
<b>Input Resistance</b>								
Voltage Input				1 Megohm				
Current Input				50 Ohms				
<b>Linearity, of Full Scale</b>				±0.02%				
<b>Accuracy, of Full Scale</b>				±0.1%				
<b>Maximum Input - No Damage</b>								
Voltage Input Models				130 VRMS				
Current Input Models				65 mA (3.25 Volts across 50 Ohm Input R)				
<b>Output</b>				4 -20 mA				
Response Time, 10% to 90%				10 ms				
Ripple and Noise, of Full Scale				0.05%				
Load				0 to 500 Ohms				
Minimum Output Current				Model 8916, 2.5 mA Typical				
Open Circuit Voltage				13 Volts				
Temp. Coefficient								
Zero				±0.5 µA/°C Typical				
Full Scale				±100 ppm/°C Typical				
<b>Power Requirements</b>								
Voltage				22 to 26 Volts DC				
Current				40 mA				
<b>Isolation, 3 Way</b>				700 VDC				
Power to Input or Output				15 pF				
Input to Output				750 pF				
60 Hertz CMRR				85 db				
<b>Environment</b>								
Operating				0°C to +55°C				
Storage				-40°C to +85°C				
<b>Size</b>	Plastic Case (UL-94V-1) with built in DIN Rail Foot			4.33"H x 0.895"W x 2.95"L (110 x 22.5 x 75 mm)				
<b>Weight</b>				5 oz. (142 grams)				
<b>Agency Approvals (pending)</b>				UL 508, UL 1604				