

## EWSA Series

### Rugged, Weatherproof Temperature Sensors and Transmitters

#### INSTRUCTION SHEET

M5732/0119

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### 1.0 Description

The EWSA air temperature sensors are designed for wall or pipe mounting in harsh indoor or outdoor environments.

A rugged 6mm diameter sheathed RTD probe is housed in the center of a 12.7 mm dia. outer protection tube. The RTD sensor terminal block or optional transmitter are housed in a tough aluminum alloy enclosure, rated to IP65.

An M20 cable gland is fitted to the left hand side of the enclosure, suitable for cables from 2.5 to 6.5 mm diameter.

### 2.0 Receiving and Unpacking

Please inspect the packaging and sensor thoroughly for any signs of transit damage. Please notify Omega customer service if any damage is found.

### 3.0 Specifications

#### Dimensions:

Box: 80 W x 75 H x 58 mm D

Sensors: 75 mm long x 12.7 mm O.D

Cable Entry: M20 gland for 2.5 to 6.5 O.D cable

#### EWSA-Pt100 Sensor Only Model:

##### Sensor Type:

- Pt100 class A 4-wire standard
- Pt1000 on request

##### Ambient Temperature Range:

- 50 to 100°C

##### Electrical Connection:

Screw terminal block

#### EWSA-Pt100-TX:

##### Ambient Temperature Range:

-40 to 85°C at 10 to 90% RH non condensing

##### Standard Transmitter Scaling:

4 mA at -25°C, 20 mA at 75°C

##### Electrical Connection:

Screw terminals, 2-wire

##### Power Supply:

10 to 30Vdc, loop powered

##### Power Supply:

$[(V \text{ supply} - 10) / 20] \text{ K}\Omega$ . eg.  $700\Omega @ 24V$

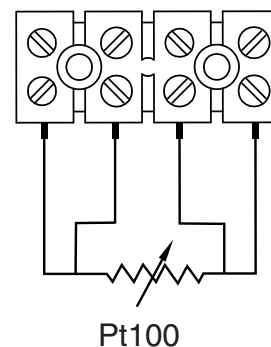


### 4.0 Mechanical Installation

The EWSA has been designed for wall or pipe mounting. For wall fixing the drilling dimensions are provided on the base of the enclosure.

### 5.0 Electrical Installation

For the EWSA-Pt100-TX temperature sensor with transmitter please refer to the transmitter manual M4561 for wiring and scaling information. The standard EWSA-Pt100 model features a 4 way screw terminal block for connection to the 4-wire Pt100 sensor.





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## 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's 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 in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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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 the product, and
3. Repair instructions and/or specific problems relative to the product.

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