

1 YEAR
WARRANTY



Ω OMEGA[®] User's Guide



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MADE IN TAIWAN

HX302A/303A SERIES Temperature/Humidity Transmitter



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The information contained in this document is believed to be correct, but OMEGA 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, human applications.

Features:

1. Fully calibrated, digital output.
2. Excellent long-term stability.
3. Ultra low power consumption.
4. Small size.

Ordering information:

Model	Descriptions	OUTPUT
HX302AC	Humidity	4-20 mA
HX303AC	Temp. & Humidity	4-20 mA
HX302AV	Humidity	0-1 V or 0-5 V or 0-10 V
HX303AV	Temp. & Humidity	0-1 V or 0-5 V or 0-10 V

Specifications :

Range	0~100% RH 0~100°C (0~50°C, -50~+50°C)
Accuracy	±3%RH, ±0.4%°C
Resolution	0.1 RH, 0.1°C
Supply Voltage	12~30V DC (24V DC)
Housing	ABS plastic watertight enclosure (IP65)
Connections	Liquid-Tight nylon. Cable Bushing: Ø5~10mm cable
Ambient Temperature	-30~+85°C (-30~+185°F)
Weight	Approx. 130g (4.5oz)

Features:

1. Fully calibrated, digital output.
2. Excellent long-term stability.
3. Ultra low power consumption.
4. Small size.

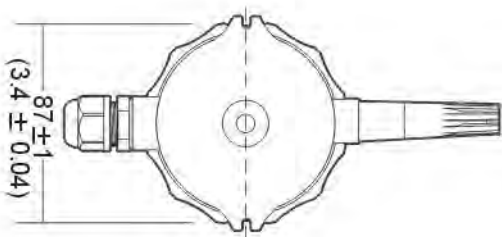
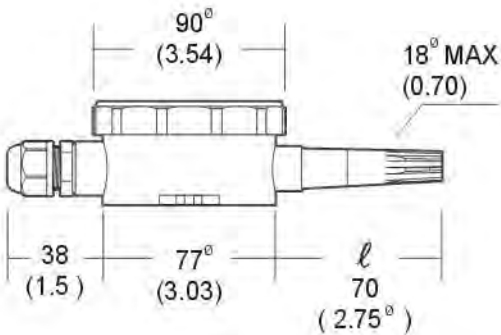
Ordering information:

Model	Descriptions	Output
HH302AC	Humidity	4-20 mA
HH303AC	Temp. & Humidity	4-20 mA

Specifications:

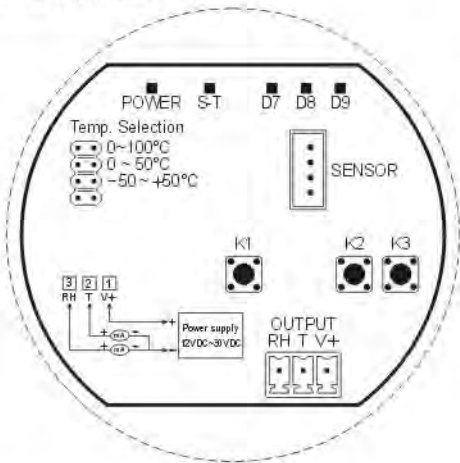
Range	0~100% RH 0~100°C (0~50°C, -50~+50°C)
Accuracy	±3%RH, ±0.4°C
Resolution	0.1 RH, 0.1°C
Supply Voltage	12~30V DC (24V DC)
Housing	ABS plastic watertight enclosure (IP65)
Connections	Liquid-Tight nylon. Cable Bushing: 05~10mm cable
Ambient Temperature	-30~+85°C (-30~+185°F)
Weight	Approx. 130g (4.5oz)

External Dimensions:
mm(inch):

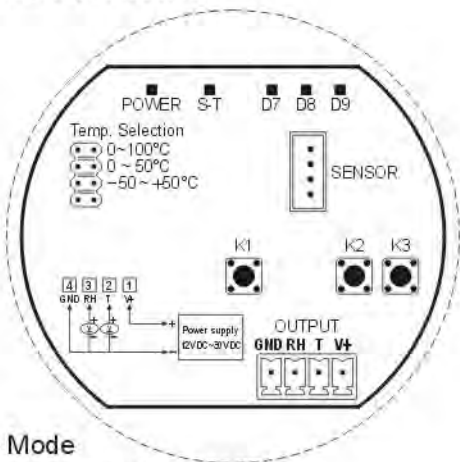


PC Board:

HX302AC, HX303AC:



HX302AV, HX303AV:



K1: Mode

K2: Increase value

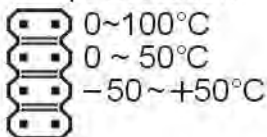
K3: Decrease value

D7~D9: LED indicator

Temperature Selection:

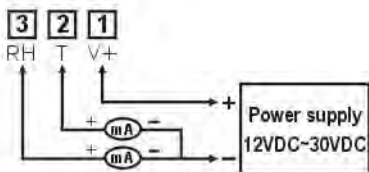
Please use the jumper to select the temperature range.

Temp. Selection

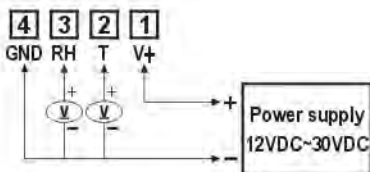


Connection Diagram:

HX302AC, HX303AC:



HX302AV, HX303AV:



Off-set Setting Mode:

Press K2 and K3 for 3 seconds to enter Off-set setting mode. D7, D8, and D9 will flash.

1. Press K1 and D9 will illuminate.
Use K2 or K3 to regulate temperature value.
2. Press K1 again, and D8 will illuminate.
Use K2 or K3 to regulate humidity value.
3. Press K1 again, and D8 and D9 will illuminate. Use K2 or K3 to regulate temperature 4mA output value.
4. Press K1 again, and D7 will illuminate.
Use K2 or K3 to regulate temperature 20mA output value.
5. Press K1 again, and D7 and D9 will illuminate. Use K2 or K3 to regulate humidity 4mA output value.
6. Press K1 again, and D7 and D8 will illuminate. Use K2 or K3 to regulate humidity 20mA output value.
7. Press K1 again, D7, D8, and D9 will illuminate:
 - (1) To exit setting mode: Press K1 and exit this mode.
 - (2) To reset to default value: Press K2 until D7, D8, and D9 flash, and then press K1.

Scan Time Setting Mode:

Scan Time Setting Mode:

Press K1 and K2 for 3 seconds to enter Scan Time Setting Mode.

Use K2 or K3 to select scan time:

LED bright	Scan time
D9	1 sec.
D8	2 sec.
D8, D9	3 sec.
D7	4 sec.
D7, D9	5 sec.
D7, D8	10 sec.

Press K1 again to set and exit this setting mode.



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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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.

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.

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