

Transmitter Series 912, 913, 914, 922, 923, 924 and 925

- Accuracy $\pm 2\%$ RH
- Choice of Voltage or Current Loop
- Voltage Outputs:
User selectable 0-1V, 0-2.5V,
0-5 and 0-10Vdc
- Current loop (2-wire) options:
4-20mA or 1-5mA
- CE approved



The relative humidity transmitter continuously measures the ambient humidity and provides analog output directly proportional to RH from 0-100%. The 2-wire model provides 4-20 mA, or optional 1-5 mA current loop output requiring a supply of 4.5 to 35 Vdc.

The optional 1-5 mA current loop design is offered for the advantages derived from lower power consumption. It results in

reduced self-heating within the electronics, especially important for small transmitters. This produces better accuracy and stability, especially when the transmitters are used with supply voltages near the lower end of the acceptable range.

The output of the 3/4-wire (voltage output) transmitter is user selectable, with options of 0-1 V, 0-2.5 V, 0-5 V or 0-10 V. The default factory setting is 0-10 V.

Relative Humidity Transmitters are available with an integral temperature transmitter or a single Pt100 or Pt1000 element. Customized versions on request.

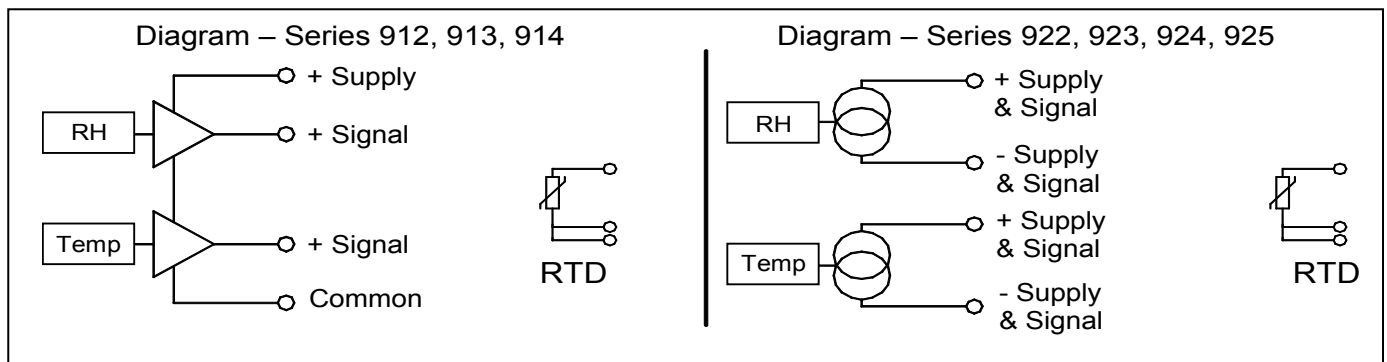
Optional are PVDF, wire mesh, or stainless steel filters to protect the sensors in dusty environments, a weather protection cap for meteorological applications, and various customized mounting flanges.

Typical Applications

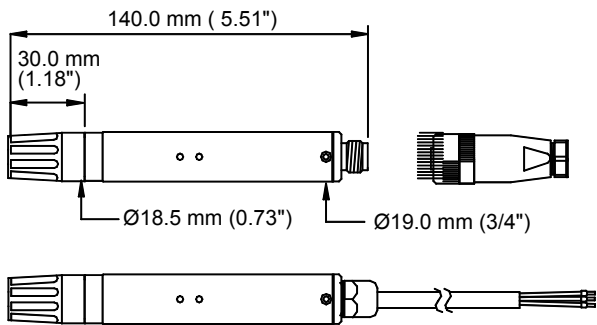
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|---------------------|-------------------|-----------------|-----------------|
| ▶ Energy management | ▶ HVCA | ▶ Grain Storage | ▶ Fruit Storage |
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| ▶ Climate control | ▶ Clean Rooms | ▶ Paper | |
| ▶ Greenhouses | ▶ Food Processing | ▶ Textiles | |

Relative Humidity & Temperature

Series 912, 913, and 914		Series 922, 923, 924 and 925	
3/4-Wire Relative Humidity Transmitter		2-Wire Relative Humidity Transmitter	
Measuring range	0 to 100% RH	Measuring range	0 to 100% RH
Operating range	5 to 95% RH	Operating range	5 to 95% RH
Output	0-1V, 0-2.5 V, 0-5 V or 0-10 Vdc (standard), output current 1mA max	Output	4-20 mA or 1-5 mA (924 is offered with 1-5 mA only)
Accuracy @ 23°C (73°F)	±2% RH (10-90 %RH)	Accuracy @ 23°C (73°F)	±2% RH (10-90 %RH)
Stability	±1% RH, 1 year typical (depending on environmental conditions)	Stability	±1% RH, 1 year typical (depending on environmental conditions)
Temperature drift	±0.03% RH per °C typical	Temperature drift	±0.03% RH per °C typical
Response time	10 sec. typical (90% of the change)	Response time	10 sec. typical (90% of the change)
Power supply	5 to 35 Vdc. Supply voltage must be > 4 volt above max output. Current draw typically 1.5 mA	Power supply	4.5 to 35 Vdc
Supply influence	±0.003% RH per V typical	Supply influence	±0.003% RH per V typical
Operating temperature	-30 to +60 °C (-20 to +140°F)	Operating temperature	-30 to +60°C (-20 to +140°F)
3/4-Wire Temperature Transmitter		2-Wire Temperature Transmitter	
Range	0 to 100°C or -20 to +80°C	Range	0 to 100°C or -20 to +80°C
Output	0-1V, 0-2.5 V, 0-5 V or 0-10 V (standard), output current 1mA max	Output	4-20 mA or 1-5 mA (924 is offered with 1-5 mA only)
Accuracy	±0.2°C (from -10 to +50°C)	Accuracy	±0.2°C (from -10 to +50°C)
Power supply	5 to 35 Vdc. Supply voltage must be > 4 volt above max output. Current draw typically 1.5 mA	Power supply	4.5 to 35 Vdc
Supply influence	±0.003 °C per V typical	Supply influence	±0.003 °C per V typical
Protection grade electronics IP65, protection grade sensor IP20 (IP50 with dust filter)			
All specifications are subject to change without prior notice			



Features - Relative Humidity & Temperature Transmitters



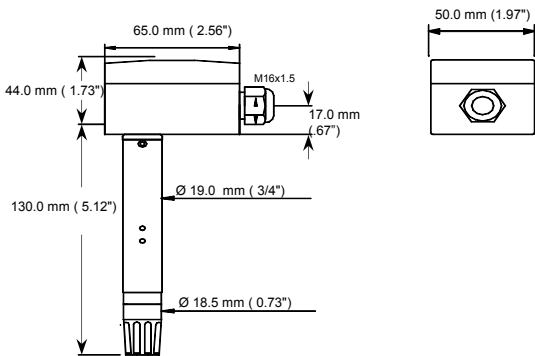
Multi-Purpose 912 / 922

Multi-functional probe for use up to 140 °F (60 °C).

Available as a 2-wire (4-20 mA or 1-5 mA) transmitter or as 3/4-wire voltage output transmitter.

Optional PVDF or wire-mesh filter for use in dusty environments. Immune to most reagent vapors.

Models combined with temperature transmitter or Pt100 or Pt1000 element.



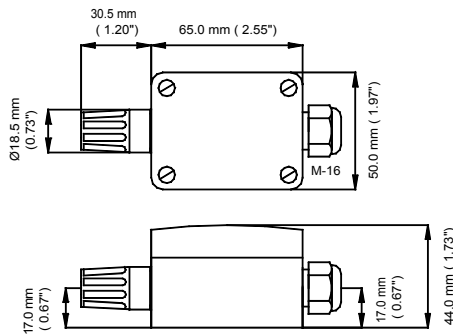
Duct-Mount 912 / 922

Miniature Humidity and/or Temperature Transmitter for Duct-Mount.

Available as a 2-wire (4-20 mA or 1-5 mA) transmitter or as 3/4-wire voltage output transmitter.

Optional PVDF or wire-mesh filter for use in dusty environments. Immune to most reagent vapors.

Models combined with temperature transmitter or Pt100 or Pt1000 element.



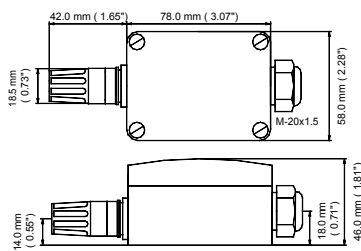
Mini-Wall Mount 913 / 923

Miniature Humidity and/or Temperature Transmitter for Wall-Mount.

Available as a 2-wire (4-20 mA or 1-5 mA) device or as 3/4-wire transmitter.

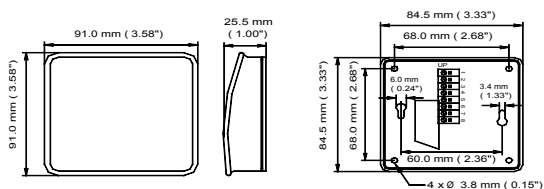
Optional PVDF or wire-mesh filter for use in dusty environments. Immune to most reagent vapors.

For supply voltages higher than 15 V in combination with 4-20 mA, consider model HT-925 to minimize self-heating errors.



Wall Mount 925

Humidity and/or Temperature Transmitter for Wall-Mount. Available as a 2-wire (4-20 mA) transmitter.



Room 914 / 924

Miniature Wall-Mount Humidity and/or Temperature Transmitter.

Available as a 2-wire (1-5 mA) or as 3/4-wire transmitter.

Selection Guide - Relative Humidity & Temperature Transmitters

Description	3/4-Wire (0-1 V, 0-2.5 V, 0-5 V or 0-10 V)	2-Wire (4-20 mA or 1-5 mA)
Male connector	HX-912-I-01	HX-922-I-01
Male connector & Temperature Transmitter	HT-912-I-01	HT-922-I-01
5 Ft (1.5m) PVC fixed cable + Pt100 1/3 DIN B sensor	HT-912-I-03	HT-922-I-03
5 Ft (1.5m) PVC fixed cable + Pt1000 1/3 DIN B sensor	HT-912-I-04	HT-922-I-04
Description	3/4-Wire (0-1 V, 0-2.5 V, 0-5 V or 0-10 V)	2-Wire (4-20 mA or 1-5 mA)
Duct-Mount Humidity Transmitter	HX-912-I-02	HX-922-I-02
Duct-Mount Humidity & Temperature Transmitter	HT-912-I-02	HT-922-I-02
Duct-Mount Humidity Transmitter & Pt100 1/3 DIN B	HT-912-I-05	HT-922-I-05
Duct-Mount Humidity Transmitter & Pt1000 1/3 DIN B	HT-912-I-06	HT-922-I-06
Description	3/4-Wire (0-1 V, 0-2.5 V, 0-5 V or 0-10 V)	2-Wire (4-20 mA or 1-5 mA)
Mini-Wall Mount Humidity Transmitter	HX-913-I-06	HX-923-I-06
Mini-Wall Mount Humidity & Temperature Transmitter	HT-913-I-06	HT-923-I-06
Description		2-Wire (4-20 mA)
Wall Mount Humidity Transmitter		HX-925-I-00
Wall Mount Humidity & Temperature Transmitter		HT-925-I-00
Description	3/4-Wire (0-1 V, 0-2.5 V, 0-5 V or 0-10 Vdc)	2-Wire (1-5 mA)
Room Humidity Transmitter	HX-914-I-00	HX-924-I-00
Room Humidity & Temperature Transmitter	HT-914-I-00	



HEAD OFFICE



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