



HUMIDITY

3% HUMIDITY TRANSMITTER & OPTIONAL TEMPERATURE TRANSMITTERS HD31K, HO31K, HW31K

DESCRIPTION

The Kele Models HW31K, HD31K, and HO31K 3% humidity transmitters are specifically designed for use in HVAC/BAS applications. These instruments measure relative humidity from 0% to 100%. The standard two-wire, 4-20 mA output provides low-cost humidity monitoring for building control. The RH transmitters are available with thermistor or RTD temperature sensors. They are available in room, duct, and OSA mounting styles.

OPERATION

The transmitter converts the relative humidity into a 4-20 mA signal with 3% accuracy. The optional temperature sensors, thermistor or RTD, offer direct connections to most automation systems.



HW31K



HD31K



HO31K



FEATURES

- 3% accuracy (5% to 90% RH)
- Two-wire, 4-20 mA output
- White plastic design

OPTIONS:

- Temperature thermistor
- Temperature RTD

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HUMIDITY

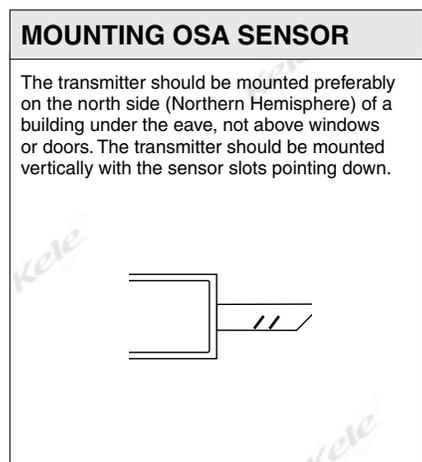
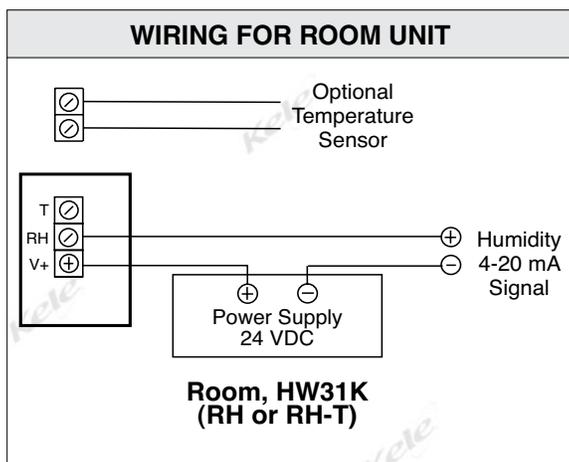
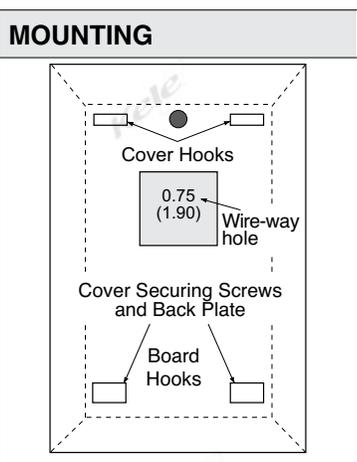
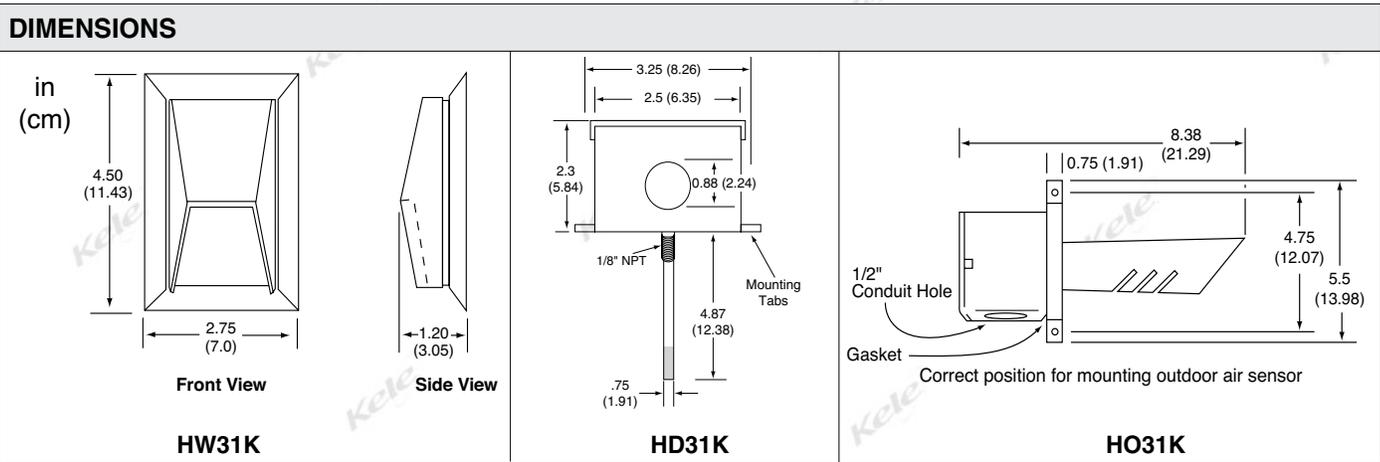
SPECIFICATIONS

Accuracy	3% RH @ 73°F (23°C) from 5% to 90%; (0-5% & 90%-100%) add 4%	Operating Temperature	-20° to 158°F (-29° to 70°C)
Thermal Effect	0.07% per °F	Operating Humidity	0-100% RH non-condensing
Stability	typically <±1% drift per year	Enclosure Rating	NEMA 1, White plastic
Supply Voltage	9.5-28 VDC, loop powered	Wiring Terminations	Screw terminals for loop termination
Signal Output	4-20 mA @ 725Ω, optional thermistor, RTD	Weight	
Measurement Range		Room	0.3 lb (0.09 Kg)
RH	0-100%	Duct	0.58 lb (0.26 Kg)
Temperature	-20° to 140°F (29° to 60°C) (see ordering information)	OSA	0.72 lb (0.33 Kg)
Sensor Protection	HDPE FGX filter (duct and OSA)	Approvals	RoHs
		Warranty	1 year



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HD31K, HO31K, HW31K



ORDERING INFORMATION

MODEL	DESCRIPTION
HW31K	3% room-mount humidity transmitter, 4-20 mA output
HD31K	3% duct-mount humidity transmitter, 4-20 mA output
HO31K	3% OSA-mount humidity transmitter, 4-20 mA output
OPTIONS (temperature sensor or transmitter)	
--	No temperature sensor
T3	10,000Ω thermistor @ 77°F (25°C), Type III
T11K	10,000Ω thermistor @ 77°F (25°C), Type III, with 11K shunt
T21	2252Ω thermistor @ 77°F (25°C), Type II
T22	3000Ω thermistor @ 77°F (25°C), Type II
T24	10,000Ω thermistor @ 77°F (25°C), Type II
T27	100,000Ω thermistor @ 77°F (25°C), Type II
T42	20,000Ω thermistor @ 77°F (25°C), Type IV
T63	1000Ω nickel RTD @ 70°F (26°C), Type III
T81	100Ω RTD @ 32°F (0°C), 385 platinum curve
T85	1000Ω @ 32°F (0°C), 385 platinum RTD
T91	1000Ω @ 32°F (0°C), 375 platinum RTD

HD31K - T3 Example: HD31K-T3 Duct-mount humidity transmitter with 10 kΩ Type III temperature sensor

RELATED PRODUCTS

- DCPA-1.2** Power supply, 120 VAC IN to 24 VAC/24 VDC OUT
- DCP-1.5-W** Power supply, 24 VAC IN to 24 VDC OUT