

Room humidity and temperature sensor

- »» Highly stable RH sensor element
- »» Humidity range: 0-100%
- »» Accuracy 3%
- »» LCD display available
- »» Field selectable outputs
- »» NTC 10k temperature sensor
- »» AC/DC operation



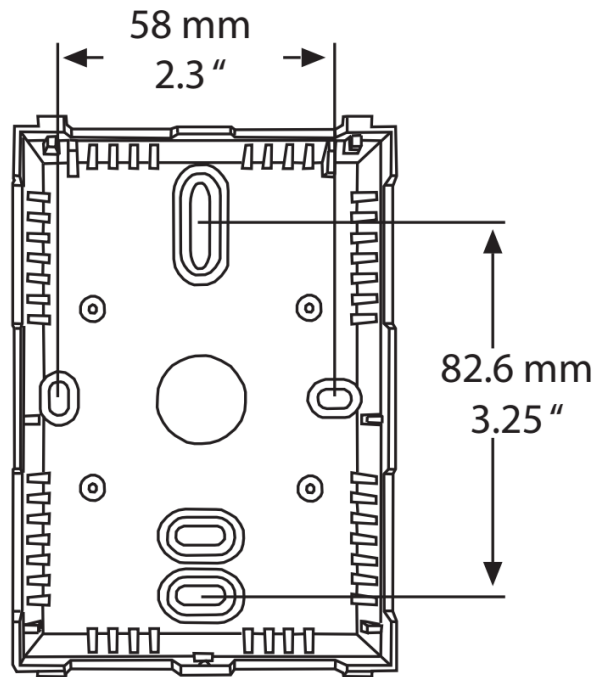
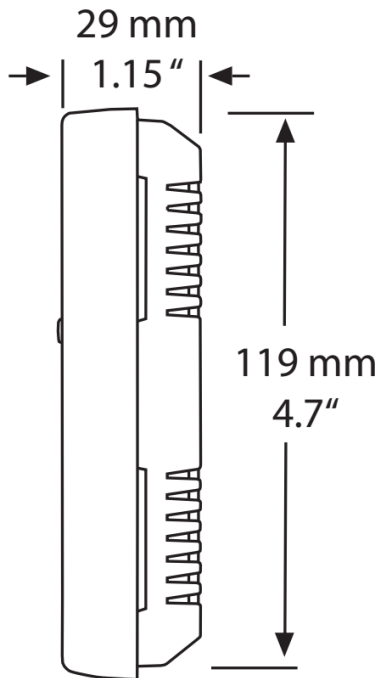
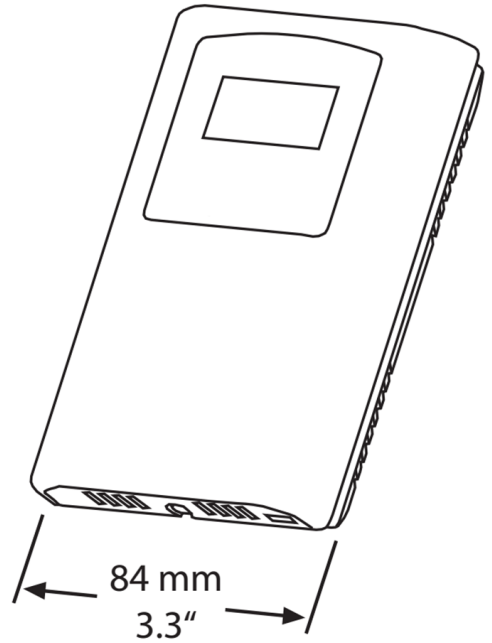
Room humidity and temperature measurement

The FX-RHTES-R humidity transmitter uses a highly accurate and reliable thermoset polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry in an attractive, low profile enclosure to monitor room humidity levels. Sensor comes with NTC 10k temperature sensor. Additional options are available which include manual override, status LED Indication, setpoint adjustment & LCD display.

Technical features

Sensor Type:	Thermoset Polymer based Capacitive
Range:	0 to 100% RH
Accuracy:	±3% RH (5 to 95% RH)
Response:	15 Seconds typical
Stability:	±1.2% RH typical @ 50% RH in 5 years
Hysteresis:	±3% RH
Repeatability:	±0.5% RH typical
Linearity:	±0.5% RH typical
Operating Conditions:	0° to 50°C (32° - 122°F), 0-95% RH non-condensing
Power Supply:	24 Vac/dc ±10% (non-isolated half-wave rectified)
Consumption:	20 mA maximum
Protection Circuitry:	Reverse voltage protected and output limited
Output Signal:	4-20 mA current loop, 0-5 or 0-10 Vdc (jumper-selectable)
Output Drive @ 24 Vdc:	550 ohms max for current output 10K ohms min for voltage output
Output Resolution:	10 bit PWM
Internal Adjustments:	Clearly marked ZERO and SPAN pots
Temperature Sensor:	NTC 10k thermistor
Enclosure Size:	84mmW x 119mmH x 29mmD (3.3" x 4.7" x 1.15")
Enclosure:	ABS - UL94-5VB - IP61 (NEMA 2)
Termination:	Screw terminal block (14 20 22 AWG)
Optional LCD:	3 digit for 00.0 to 99.9% RH, 38.1 x 16.5 mm, Symbol: % RH
Manufacturing Process:	ISO9001

Temp.	Ω	Temp.	Ω	Temp.	Ω
		29	8406	9	20884
140	235	28	8779	8	21918
130	301	27	9165	7	23015
120	390	26	9574	6	24170
110	511	25	10000	5	25391
100	679	24	10448	4	26683
95	786	23	10924	3	28051
90	916	22	11421	2	29498
85	1070	21	11940	1	31030
80	1255	20	12491	0	32650
75	1480	19	13073	-5	42327
70	1752	18	13681	-10	55329
65	2083	17	14325	-15	72957
60	2488	16	15000	-20	97083
55	2986	15	15710	-25	130422
50	3602	14	16461	-30	176976
45	4368	13	17256	-35	24682
40	5324	12	18091	-40	336479
35	6532	11	18970	-45	472178
30	8055	10	19902	-50	671305



Part numbers

FX-RHTES-R
FX-RHTES-R-LCD

RH 0-5/10 Vdc or 4-20 mA, **TE** NTC 10k
 with 3-digit LCD display