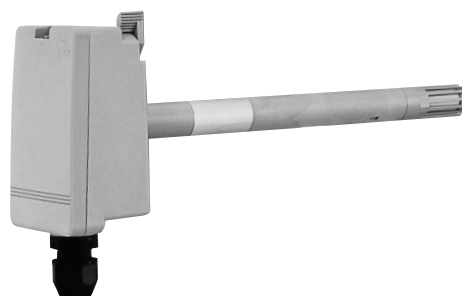


# Duct Temperature / Humidity Sensor | HTY78 Series

The duct temperature/humidity sensors in the HTY78 series are highly accurate and highly reliable sensors that use a Pt100 platinum resistance temperature detector (JIS C1604 class A) as the temperature sensing element and a polymer capacitive humidity sensing element (our internally developed FP3) as the humidity sensing element. With their wide measurement range and excellent stability, they can be used in a variety of industrial applications as well as building air conditioning, outdoor air measurement, and other applications.



## Specifications

Measurement range	Temperature: -20 to +60 °C Humidity: 0 to 100% RH (-5 to +55 °C)
Detection accuracy	Temperature: ±0.3 °C (-20 to +60 °C, for 24 Vac/Vdc model) ±0.5 °C (0 to 50 °C, for 24 Vdc, two-wire model) ±0.3 °C (15 to 35 °C, for 24 Vdc, two-wire model) Humidity: ±3% RH (30 to 70% RH at 25 °C) ±5% RH (20 to 30% RH, 70 to 80% RH at 15 to 35 °C)
Sensing elements	Temperature: Pt100: platinum thin-film resistance temperature detector (JIS C1604 class A) Humidity: polymer thin film
Output signal	Temperature: 100 Ω/0 °C (24 Vac/Vdc model) 4 to 20 mAdc (for 24 Vdc model, linear against -20 to +60 °C) Humidity: 1 to 5 Vdc (linear against 0 to 100% RH) 4 to 20 mAdc (linear against 0 to 100% RH)
Rated power supply voltage	24 Vac 50/60 Hz, 24 Vdc
Power consumption	0.23 VA (24 Vac, 1 to 5 V output model) 170 mW (24 Vdc, 1 to 5 V output model) 1.0 VA (24 Vac, 4 to 20 mA output model) 800 mW (24 Vdc, 4 to 20 mA output model) 550 mW (24 Vdc two-wire, 4 to 20 mA output model)
Dust-proof, drip-proof	Housing: IP54
Weight	Inserted part: long 240 g, short 210 g

## Model No. configuration

Model No.	Description
HTY7803T1P00	Duct temperature / humidity sensor, temperature Pt100Ω, humidity output: 1 to 5 V, inserted part: long
HTY7803T4P00	Duct temperature / humidity sensor, temperature Pt100Ω, humidity output: 4 to 20 mA, inserted part: long
HTY7803D4400	Duct temperature / humidity sensor, two-wire type: temperature output 4 to 20 mA, humidity output: 4 to 20 mA, inserted part: long
HTY7813T1P00	Duct temperature / humidity sensor, temperature Pt100Ω, humidity output: 1 to 5 V, inserted part: short
HTY7813T4P00	Duct temperature / humidity sensor, temperature Pt100Ω, humidity output: 4 to 20 mA, inserted part: short
HTY7813D4400	Duct temperature / humidity sensor, two-wire type: temperature output 4 to 20 mA, humidity output: 4 to 20 mA, inserted part: short

## Optional parts (sold separately)

Name	Model No.
Mounting bracket	83157235-001
Electric wire mounting set (applicable cable outer diameter of φ11 to φ14)	83157240-004
Seal connector (applicable cable outer diameter of φ10.5 to φ14.5)	83104098-004
Sensor shield for outdoor use	DY8000A1001
Sensor mounting bracket for instrument screen (L-shape fitting)	DY3002A1005

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DIGITAL CONTROLLERS

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CONVERTERS

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GAS FLOW MEASUREMENT AND CONTROL PRODUCTS