



A Type



B Type

Description & Features:

- The WRH1 and WTH1 series are indoor temperature and humidity sensors with built-in transmitter outputs
- These products offer multiple power supply options and analogue or digital output signals to choose from
- Designed & manufactured with high-precision fast responding sensors with strong long-term stability
- They provide multiple measurement and output modes and are suitable for a variety of HVAC control systems
- Higher IP housing rating and an optional high-definition LCD display
- Complete protection against overvoltage, reverse polarity and EMC interference
- Compact sizing with aesthetically pleasing design and very easy to install
- 5 year warranty

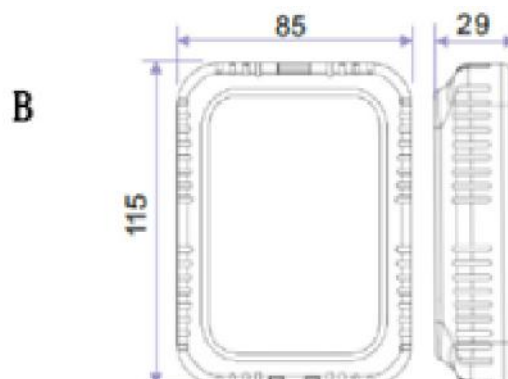
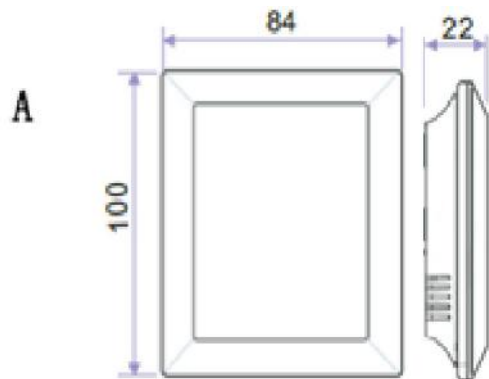
Applications:

- The products are widely used in HVAC control systems of various types in commercial and government buildings as well as manufacturing and processing facilities
- Suitable for indoor temperature and humidity measurement, such as clean rooms, laboratories, hospitals, datacentres, schools, and many more application areas
- Also appropriate for measuring ambient temperature and humidity in cabinets or other small spaces

Technical Parameters

Measuring Range	Temperature: 0/50°C & 32/122°F, -20/80°C & -4/176°F or -40/60°C & -40/140°F Humidity: 0-100% RH
Standard Accuracy	Temperature: 0.1°C (PT100, Class B @ 25°C / 77°F) Humidity: 0.8% RH @ 25°C
Hysteresis and Repeatability	Temperature: 0.05°C Humidity: 0.2%RH
Long Term Stability	Temperature: <0.1°C / year Humidity: <1% RH / year
Output Signal	4/20mA, 0/10V, 0/5V or RS485
Current Output	12 VDC power supply, RL ≤ 250Ω 24 VDC power supply, RL ≤ 500Ω
Voltage Output	RL ≥ 10 KΩ
Overall Dimensions	A Type: 3.3"x3.9"x0.9" (84mm*100mm*22mm), B Type: 3.3"x4.5"x1.1" (85mm*115mm*29mm)
Housing Material	ABS and Polycarbonate
Protection Level	IP30
Fire Rating	V-0, refer to UL94 listing
Product Certification	CE, RoHS
Display Type	LCD @ -10/60°C or 14/140°F - Note: To be installed in non-condensing environments
Working Environment	-25/70°C or -13/158°F & 0-95% RH, No condensation
Storage Environment	-40/70°C or -40/158°F & 0-95% RH, No condensation

Dimensions (mm)



100mm = 3.9"

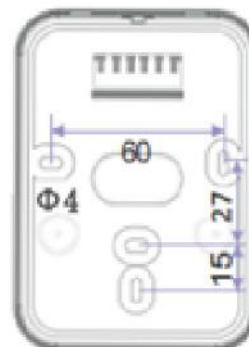
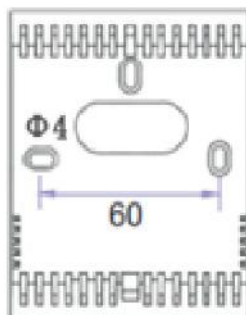
84mm = 3.3"

22mm = 0.9"

115mm = 4.5"

85mm = 3.3"

29mm = 1.1"



Series Number (how to order)

WTH1 - Indoor temperature and humidity transmitter engineering order codes

Description	Technical parameters						
Power supply	24 Vdc	1					
	24 Vac	2					
	12 Vdc	3					
Output signal	No output signal		0				
	4/20 mA		1				
	0/10 V		3				
	0/5 V		6				
	RS485		R				
Temperature range (PT1000)	No temperature reading			0			
	0/50°C & 32/122°F			1			
	-20/80°C & -4/176°F			3			
	-40/60°C * -40/140°F			4			
	Customized			#			
Humidity accuracy	±2% RH				2		
	±3% RH				3		
	±5% RH				5		
LCD	Without LCD display					-	
	With LCD display, °C and % Relative Humidity					SC	
	With LCD display, °C / °F and % Relative Humidity					DS	
Customization	Special ranges, labelling etc						Z###

WRH1 - Indoor Humidity or Temperature Sensor engineering Order Codes

Description	Technical parameters						
Power supply	24 Vdc	1					
	24 Vac	2					
	12 Vdc	3					
Output signal (Humidity only)	No output signal		0				
	4/20 mA		1				
	0/10 V		3				
	0/5 V		6				
	RS485		R				
Temperature output (-40/80 °C / -40/176°F)	No temperature reading			0			
	Pt100			1			
	Pt1000			2			
	NTC10K			4			
	NTC20K			5			
	Other types			#			
Humidity accuracy	±2% RH				2		
	±3% RH				3		
	±5% RH				5		
LCD	Without LCD display					-	
	With LCD display, % Relative Humidity					RH	
Customization	Special ranges, labelling etc						Z###