

# KTH500

## Temperature and Humidity Transmitter

**KeramControls®**

### Description

KTH500 temperature and humidity transmitters can be used to measure relative humidity and temperature in various HVAC applications, as well as monitor building energy management systems. This series of products includes duct-mounted transmitters, IP65 protection grade wall-mounted transmitter. KTH500 series temperature and humidity transmitters are easy to install, have high accuracy, stable and reliable operation, and are ideal for various harsh environments.

### Features

- LCD display
  - Large size backlight display
- Shell connected by hinge
  - More convenient wiring and setting
- M16 M20 double cable gland
  - Cable size  $\phi 5 \dots 12\text{mm}$
- Smooth and flat surface
  - Prevent the pollution of the shell surface in harsh environment
- IP65/NEMA4

### Applications

- HVAC system
- Greenhouse
- Food transportation
- Cold storage and refrigeration
- Clean room environment monitoring

### Technical Data

Model	KTH500
Power supply	16-30V DC (2 wire 4-20mA) / 16-30V AC or V DC ( 0-5V/0-10V/RS 485 )
Output	4-20mA / 0-5V / 0-10V/ RS 485
Operating temp	-35 ... +70°C
Storage temp	-40 ... +60°C
Operating humidity	0 ... 100 %RH
Temperature range	DIP switch
Display	Backlight LCD
Maximum wind / Flow speed	30 m/s
Electromagnetic compliance	EN61326-1, Industrial Environment
Housing material	PC+ABS (UL-V0 approved)
Ingress protection	IP65 / NEMA 4
Cable gland	M16*1.5 / M20*1.5
Measurement performance-Temperature	
Measurement range	-35 ... +80 °C
Accuracy	$\pm 0.3^{\circ}\text{C}$ (20-60°C)
Temperature dependence	$\pm 0.01^{\circ}\text{C}/^{\circ}\text{C}$
Measurement performance-Humidity	
Measurement range	0 ... 100 %RH
Accuracy	$\pm 2\%$ (0-90% @25°C) / $\pm 3\%$ (90-100% @25°C)
Stability in typical HVAC applications	$\pm 1\%$ RH/year



**A: Duct Mounted**



**B: Wall Mounted**

## Notes On Disposal



Most Keram Controls products may contain valuable materials that should be recycled rather than treated as domestic waste. Please pay attention to the relevant regulations of local disposal.

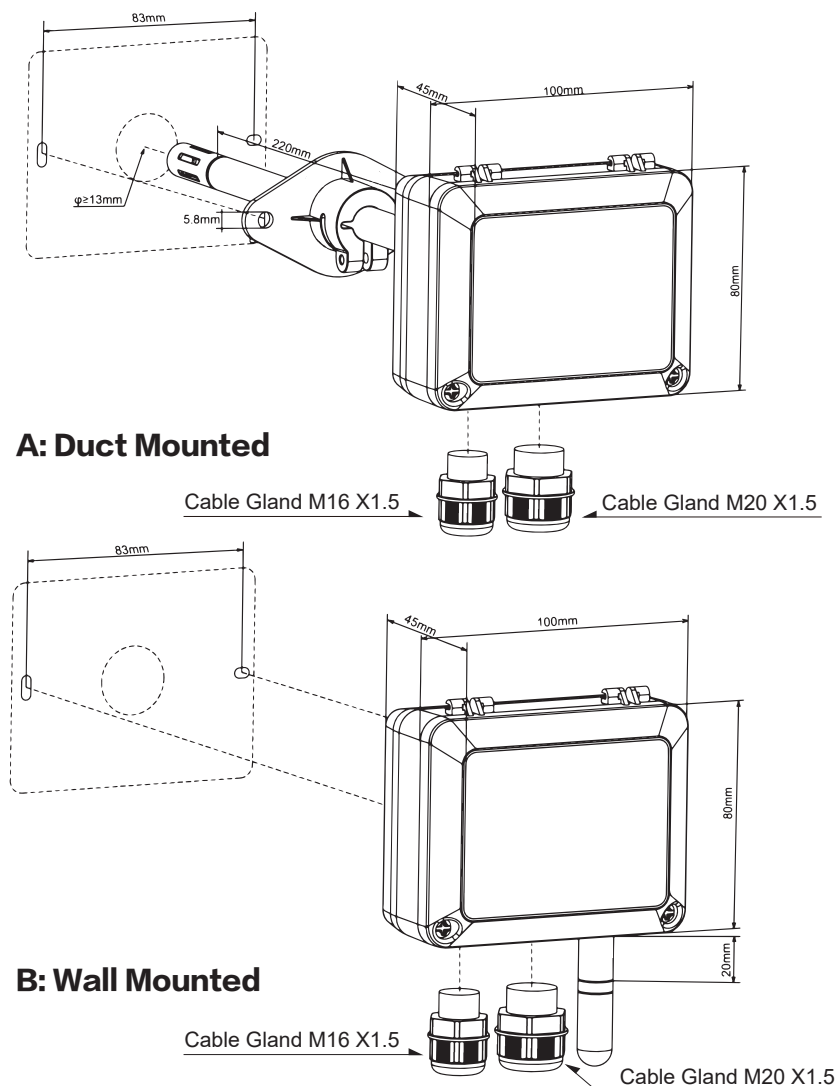
## Product Certification







Declaration of conformity

The declaration of conformity of the products can be found on our website [Https://: www.keramcontrols.com](https://www.keramcontrols.com)




## Dimensions (mm)



## Measuring Range Adjustment

<b>ON</b>  1 2	<b>ON</b>  1 2	<b>ON</b>  1 2	<b>ON</b>  1 2
-35 ... +75°C	-35 ... +35°C	0 ... +50°C	0 ... +80°C

## Output Setting (3-wire Model)

<b>ON</b>  3 4	<b>ON</b>  3 4	<b>ON</b>  3 4
<b>0-5V</b>	<b>0-10V</b>	<b>4-20mA</b>



To configure the transmitter, it must not be energized. Then, you can make the settings required, with the DIP switches. When the transmitter is configured, you can power it up.

## Ordering Guide

KTH500	Output		Installation		Filter	
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KTH500	4-20mA(2-wire)	(E)	Wall	(W)	PTFE	(P)
	4-20mA(3-wire)	(F)	Duct	(D)	Stainless	(S)
	0-5V/0-10VDC(3-wire)	(G)				
	RS-485	(H)				

## Order Examples

### KTH500-FWP

<b>Model</b>	KTH500 Temperature and Humidity Transmitter
<b>Output</b>	4-20mA
<b>Installation</b>	Wall-mounted
<b>Filter</b>	PTFE