# **KTH500**

# Temperature and Humidity Transmitter

# **E**\(\text{eramControls}^\end{align\*}

#### **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 φ5...12mm
- 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



**A: Duct Mounted** 



**B: Wall Mounted** 

#### **■ 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	±0.3°C (20-60°C)				
Temperature dependence	±0.01 °C/°C				
Measurement performance-Humidity					
Measurement range	0 ··· 100 %RH				
Accuracy	±2% (20-90% @25°C) / ±3% (90-100% @25°C)				
Stability in typical HVAC applications	±1 %RH/year				



#### **■ 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.

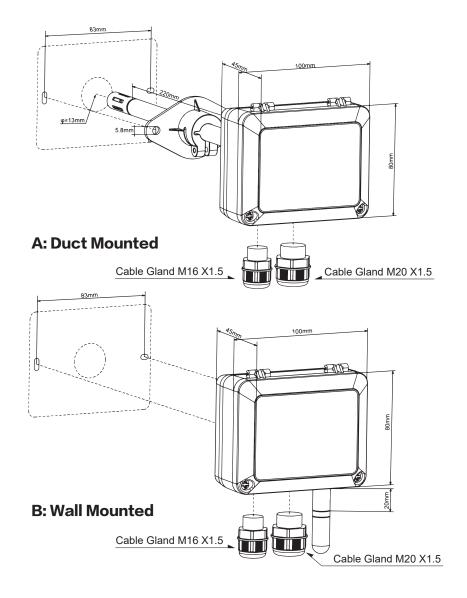
#### **Product Certification**



Declaration of conformity

The declaration of conformity of the products can be found on our website Https://: www.keramcontrols.com

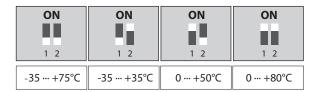
# **Dimensions** (mm)



# Temperature and Humidity Transmitter



## **■ Measuring Range Adjustment**





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 -		<ul><li>Installation</li></ul>		Filter	
Model	Output		Installation		Filter	
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

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