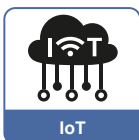
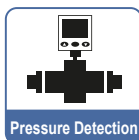
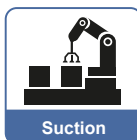


## Features

- Smart pressure sensor
- Remote control
- Real-time monitoring
- Multiple output function
- Cost reduction
- IO-Link compatible

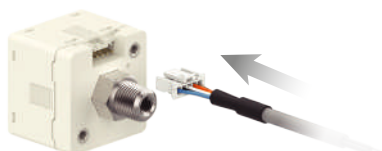
IO-Link IO-Link



## Features Highlight

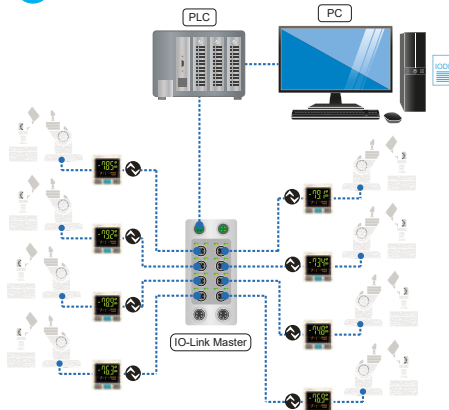
### 1 Quick Installation

- Save Installation Time
- Easy Removal



( Removable Data Cable )

### 2 IO-Link compatible



### 3 2-Color Main Display

- User selectable color mode, for different conditions use



	SoG	SoR	Grn	Red
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

## IO-Link Specifications

Type	Device
Version	V1.1
Communication Speed	COM2 ( 38.4 kbps )
Configuration File	IODD file ※1
Min. Cycle Time	3 ms
Process Data Length	Input Data : 2 byte ( 2 bit BCD ; 14 bit PDV ) , Output Data : 0 byte
On Request Data Communication	Available
Data Storage Function	Available
Event Function	Available
Vendor ID	1254 ( 0x04E6 )
Device ID	KP72V - □ : 170 ( 0x0000AA ) KP72C - □ : 171 ( 0x0000AB ) KP72P - □ : 172 ( 0x0000AC )

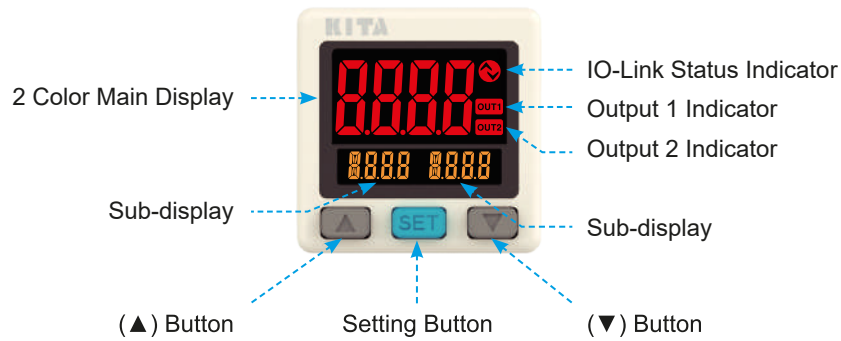
### NOTE

※1 : IO-Link device description ( IODD ) is available on KITA web site : [www.kita.com.tw](http://www.kita.com.tw)


**Specifications**

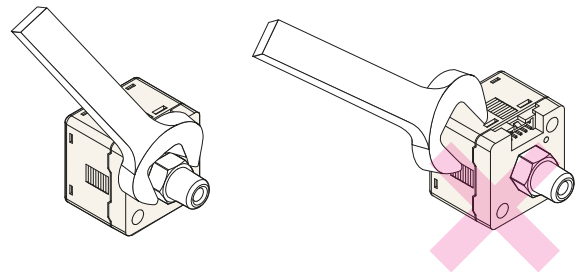
MODEL	KP72C		KP72V		KP72P	
	Compound Pressure		Vacuum Pressure		Positive Pressure	
Rated Pressure Range	-100.0 ~ 100.0 kPa		0.0 ~ -100.0 kPa		0.000 ~ 1.000 MPa	
Set Pressure Range	-105.0 ~ 105.0 kPa		10.5 ~ -105.0 kPa		-0.105 ~ 1.050 MPa	
Withstand Pressure	500 kPa				1.5 MPa	
Fluid	Filtered air, Non-corrosive / Non-flammable gas					
Set Pressure Resolution	kPa	0.1		1		
	MPa	-		0.001		
	kgf / cm <sup>2</sup>	0.001		0.01		
	bar	0.001		0.01		
	psi	0.01		0.1		
	inHg	0.1		-		
	mmHg	1		-		
Power Supply Voltage	24 V DC, Ripple ( P-P ) ≤ 10 %					
Current Consumption	≤ 35 mA ( no load )					
Switch Output	NPN : open collector outputs Max. Load Current : 150 mA Max. Supply Voltage : 30 V DC Residual Voltage : ≤ 1 V ( Load current 150 mA )		PNP : open collector outputs Max. Load Current : 150 mA Max. Supply Voltage : 24 V DC Residual Voltage : ≤ 1 V ( Load current 150 mA )			
Repeatability	± 0.2 % F.S ± 1 digit					
Hysteresis	Single Point Mode	Adjustable				
	Window Comparator Mode					
Output Short Circuit Protection	Yes					
Display	Main Display : 4 digital, 7 segment LCD display ( Red / Green ) Sub Display : 4 digital, 1st digit 11 segment, 7 segment for other ( Orange )					
Indicator Accuracy	± 2 % F.S ± 1 digit ( Ambient temperature : 25 ± 3 °C )					
Switch on Indicator	Red Indicator 1, 2 : OUT1 or OUT2 ; Green Indicator 1, 2 : OUT1 or OUT2					
Analog Output ( Voltage Output )	Output Voltage : 1 ~ 5 V or 0 ~ 10 V ± 2.5 % F.S ( within rated pressure range ) Linearity : ± 1.5 % F.S. Output Impedance : about 1 kΩ					
Analog Output ( Current Output )	Output Current : 4 ~ 20 mA ± 2.5 % F.S ( within rated pressure range ) Linearity : ± 1.5 % F.S. Max. Load Impedance : 500 Ω					
Environment	Enclosure	IP40				
	Ambient Temp. Range	Operation : 0 ~ 50 °C, Storage : -10 ~ 60 °C ( No condensation or freezing )				
	Ambient Humidity Range	Operation / Storage : 35 ~ 85 % RH ( No condensation )				
	Withstand Voltage	1000 V AC in 1-min ( between case and lead wire )				
	Insulation Resistance	≥ 50 MΩ ( at 500 V DC, between case and lead wire )				
	Vibration	Total amplitude 1.5 mm or 10 G, 10 Hz ~ 55 Hz ~ 10 Hz scan for 1 minute, 2 hours each direction of X, Y and Z				
Shock	100 m/s <sup>2</sup> ( 10 G ), 3 times each in direction of X, Y and Z					
Temperature Characteristic	± 2 % F.S of detected pressure ( 25 °C ) at temp. ( Range of 0 ~ 50 °C )					
Port Size	F1 : R1/8", M5 ; F2 : NPT1/8", #10-32 UNF ; F3 : G1/8" ( BSPP ), M5					
Lead Wire	Ø4 Oil-resistance cable ( PVC ) - 26 AWG ( 0.15 mm <sup>2</sup> ) - 5 cores					
Weight ( with 2 meter lead wire )	Approx. 80 g					

## Panel Description

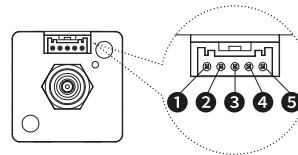
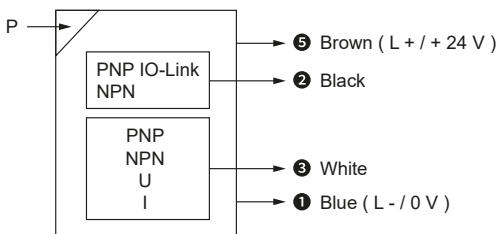


## Installation Precautions

- When mounting, always use the wrench on the metallic area near the pressure port. Never apply a wrench to the plastic body, it will damage the sensor.
- Over tightening may cause damage to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply air pressure and power after installation, make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



## Circuit Wiring Diagrams



Pin No.	Line Color	Content
①	Blue	0 V
②	Black	Switch output OUT1 or IO-Link ( C / Q Line )
③	White	Switch output OUT2 or analog output ( 1 ~ 5 V, 0 ~ 10 V, 4 ~ 20 mA )
④	Orange	Not Used
⑤	Brown	Operating voltage + 24 V DC

※ NPN/PNP of switch output can be switched.

## Ordering Information

**K P 7 2 C - F 1**

### Pressure Range

- C : Compound pressure ( -105.0 ~ 105.0 kPa )
- V : Vacuum pressure ( 10.5 ~ -105.0 kPa )
- P : Positive pressure ( -0.105 ~ 1.050 MPa )

### Pressure Port

- F1 : R1/8", M5
- F2 : NPT1/8", #10-32UNF
- F3 : G1/8" ( BSPP ), M5

### Optional Parts

- BT-12 : Mounting bracket
- BT-13 : Mounting bracket
- PA-C : Panel adapter
- PA-D : Panel adapter + Front protective lid

### Optional Parts

- Mounting bracket : BT-12 / BT-13



- Panel adapter : PA-C

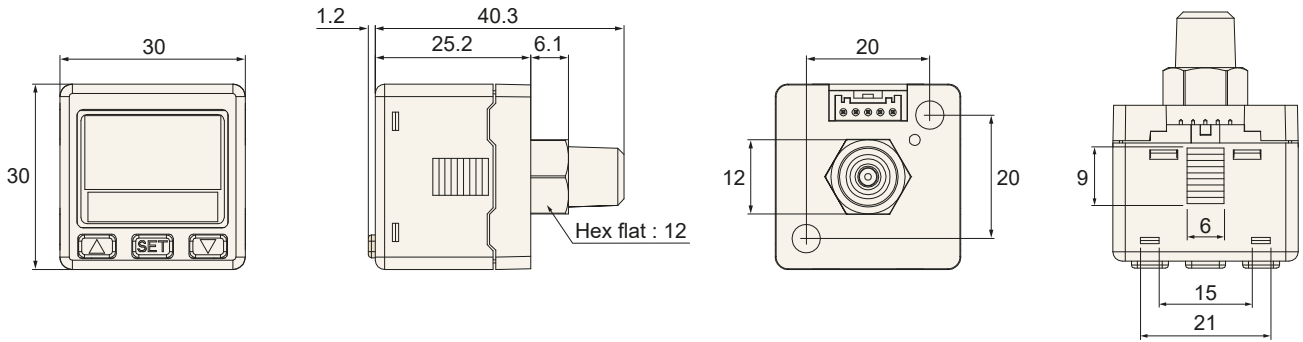


- Panel adapter + Front protective lid : PA-D



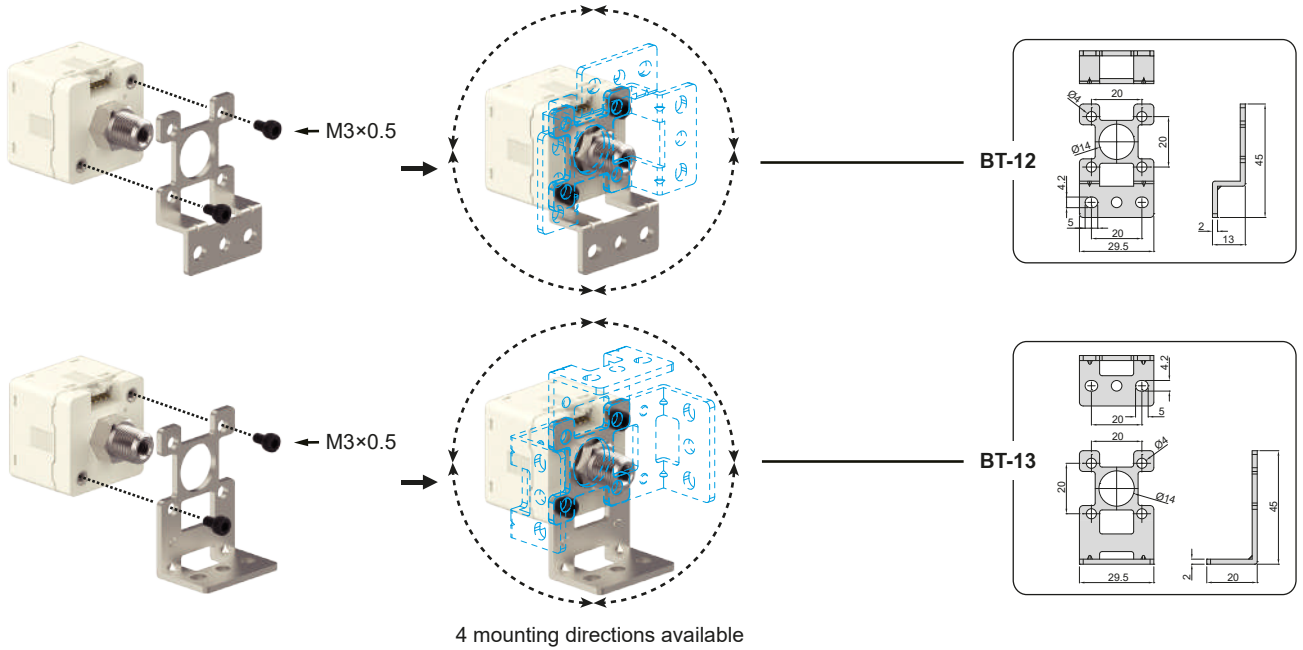


**Dimensions**

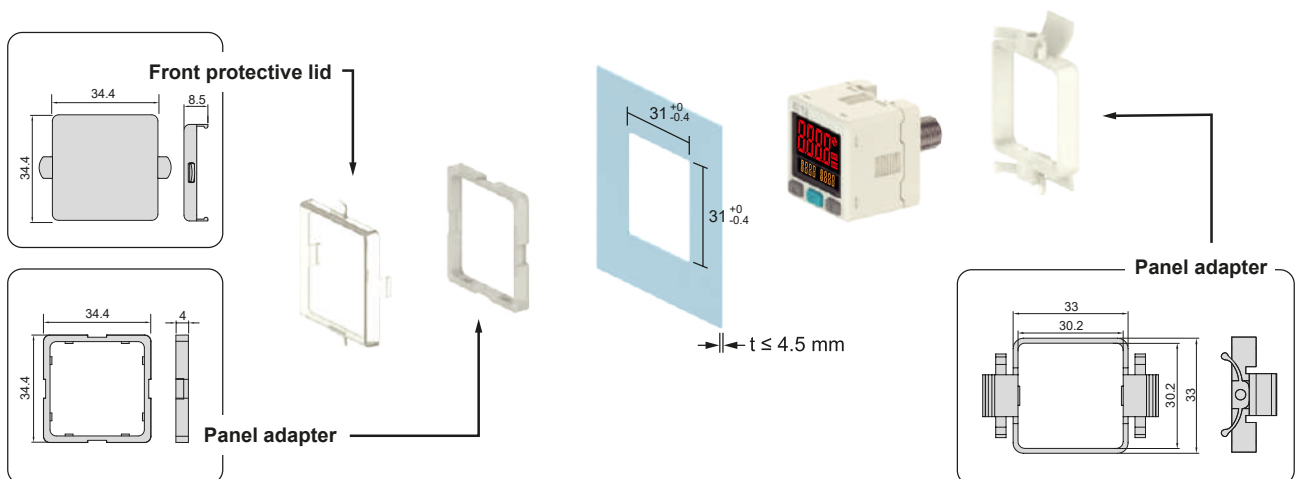


**Optional Parts Dimensions**

**1 Mounting Bracket**



**2 Panel Mount Adapter + Front Protective Lid**



Unit : mm