



# UPS1 Intelligent Pressure Switch

## Description

UPS1 intelligent pressure switch is newly developed by UTOP, and it combines the functions of pressure measurement, display and control together. UPS1 adopts the advanced MCU and DSP IC, equipped with high reliability of power management module, and also integrated high quality piezoresistive pressure sensor (UPX19 model). After our R&D engineer's careful design and calibration, UPS1 realizes the feature like high speed response and good electromagnetic compatibility.

UPS1 intelligent pressure switch realizes the visual processing for process pressure and switch contact state through its switch output, analogue output and displaying screen. This product can be provided with various output configuration to meet different application. UPS1 has the functions of delay setting, manual reset(clear zero), as well as peak value display etc. The display screen can rotate 180°, and switch body can rotate 340°. UPS2 supports serial port 232 level communication, it adopts MODBUS-RTU PROTOCOL.

UPS is widely used for industrial site pressure control in pump, hydraulic and pneumatic equipments.



## Features

- PNP , Voltage and Current output for optional
- PNPswitch point setting, time delay setting for action.
- OLED display
- Switch body rotate 340
- Display turn 180°
- Pressure peak value display
- Ranges drift function(proposing not exceed 4:1)
- Change-over of different engineering units
- MODBUS RTU Communication for optional

## Specifications

switch configuration	2 x PNP + 0~5V voltage output 2 x PNP + 0~10V voltage output 2 x PNP + 0.5~4.5 voltage output 2 x PNP + 4~20mA current output 2 x PNP + 0~20mA current output
switch current	Max. 1.2A
switch response time	<10ms
switch delay	can be set
switch action mode	delaying mode or window mode

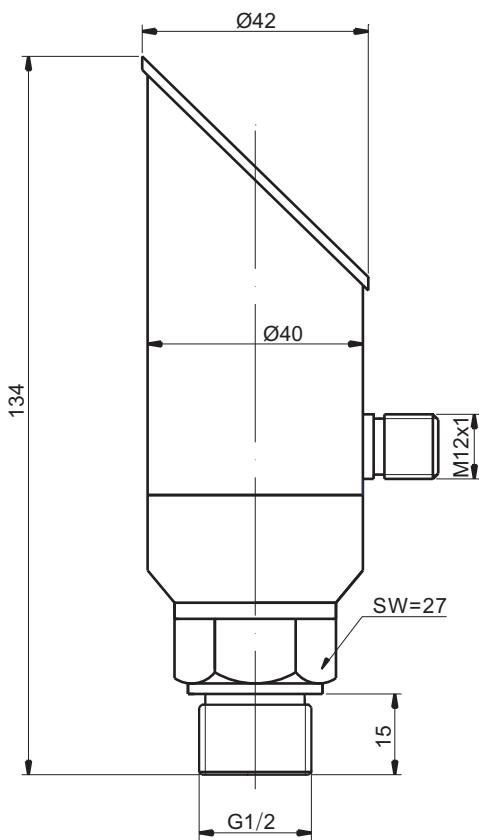


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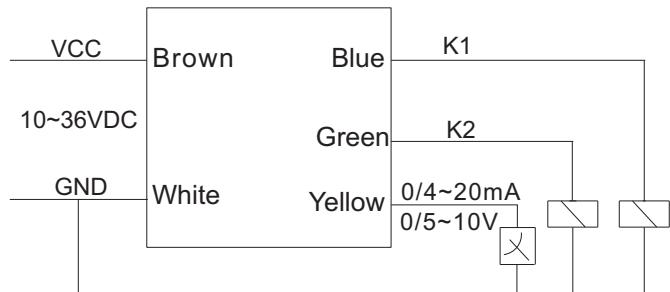
## Specifications

pressure ranges	-1...0~0.1...1000bar
range drift	25~100%FS
pressure type	absolute, gauge, sealed pressure
accuracy	0.25%FS, 0.5%FS
display	5-digit OLED
display range	-32767~32767
selectable units	kPa, MPA, Pa, bar, psi, kgf/cm <sup>2</sup> , mH <sub>2</sub> O, mbar, mmHg
switch display	2 red LED
long-term stability	<0.2%FS/year
supply voltage	10~36VDC
operating temperature range	-30~+80
temperature coefficient of zero	0.2%FS/10
temperature coefficient of span	0.2%FS/10
process connection	G1/2 or others
electrical connection	5-core M12x1(8-core M12x1, 232 serial port, MODBUS RTU Protocol)
housing material	304 Stainless steel
peak value display	pressure peak value
protection	IP 65

## Dimensions



## Electrical connection





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## Ordering code

UPS1							
	range (X1~X2)bar	measuring range: -1...0bar~0.1...1000bar X1: lower limit of actual measuring range, X2: higher limit of actual measuring range					
		code	pressure type				
		G	gauge				
		A	absolute				
		S	sealed gauge				
		D	differential				
		code	accuracy				
		B	0.1%FS				
		C	0.25%FS				
		D	0.5%FS				
		code	output				
		O1	2 x PNP + 0~5V voltage output				
		O2	2 x PNP + 0~10V voltage output				
		O3	2 x PNP + 0.5~4.5V voltage output				
		O4	2 x PNP + 4~20mA current output				
		O5	2 x PNP + 0~20mA current output				
		Oz	customer request				
		code	process connector				
		P1	G1/4				
		P2	G1/2				
		P3	1/4NPT				
		P4	M20×1. 5				
		Pz	customer request				
		code	process connector(M12x1)				
		E1	5 core				
		E2	8 core(MODBUS RTU)				
UPS1	(0~10)bar	G	C	O4	P2	E1	