#### **Main Specifications**

#### ▼ Pressure connection

Material: SS304 / 316 M20x1.5, G1/4", G1/2" 1/4" NPT (F), 1/4" NPT (M) 1/2" NPT (F). 1/2" NPT (M)

#### ▼ Electrical connection

M12x1 4-pin aviation plug / M12x1 5-pin aviation plug For more specifications please refer to the selection table

#### **▼**Pressure range

0...1kPa~40MPa

For details please refer to pressure range table

#### ▼Analog output signal

4-20mA (Transmission distance <1000m)

#### **▼**Switch output signal

NPN / PNP

#### ▼ Digital output signal (option)

RS485

(Transmission distance

<1200m)

#### ▼Applicable media

Liquid and gas that compatible with pressure connection

#### ▼ Media temperature

-40 to 120°C

#### ▼Ambient temperature

-40 to 85℃

#### **▼**Storage temperature

-40 to 85℃

#### **▼**Relative humidity

0...95%RH@40°C

**▼**Protection level

IP67

#### Other Specifications

#### **▼**Screen display

5-digit OLED screen

#### **▼**Screen size

23 x 13mm

#### **▼**Pressure unit

kPa, MPa, bar, psi, mmHg, mmH<sub>2</sub>O, mH<sub>2</sub>O, inH<sub>2</sub>O, ftH<sub>2</sub>O, inHg, mHg, Torr, mbar, g/cm<sup>2</sup>, kg/cm<sup>2</sup>, Pa, atm, mm, m

#### **▼**Power supply

12...30VDC

#### **▼**Rated current

≤60mA (4-20mA)

≤45mA (RS485)

#### **▼**Power consumption

≤1.44W (4-20Ma output)

≤1.08W (RS485 output)

#### ▼Measuring element

Stainless steel welding with isolation diaphragm
Material: SS316 / Hastelloy C
Inside liquid filling: Silicon oil

#### **▼**Stability

±0.2% F.S./ 5 years

#### **▼**Comprehensive accuracy

±0.1% F.S.

#### ▼Insulation resistance

≥20mΩ, 100VDC

#### **▼**Load resistance

< (Power supply-12)/ 0.06

#### ▼Weight

About 1kg

(Not include mounting

brackets and threaded fittings)

# **Digital Pressure Switch**

# Model: DPS-L131 Introduction

DPS-L131 is a high performance digital pressure switch adopts monocrystalline silicon sealing technology and integrated design. The sensor is located on the top of the body, away from the media contact surface, with mechanical isolation and thermal isolation and other functions. DPS-L131 can be applied to the extreme chemical environment, mechanical load and electromagnetic interference and other harsh industrial pressure measurement and control requirements.









Due to the variety of customization, the picture is only for reference, please confirm the actual item with our sales. (If there is any change on specification, please take the latest version as standard.)

### **Features**

- 5-digit OLED highlight screen display, three-button control design
- Switchable three display modes: Pressure value + unit / Percentage + pressure value + unit / SPn, pressure value and RPn
- 350° rotatable head , 180° flip screen, suitable to read from any angle
- NPN / PNP switch signal output
- RS485 signal output available
- Various switchable pressure units
- Save and track the measured data
- Independent breathable cavity structure, isolate the gas-conducting end from the electronic room, reduce the impact of external temperature and humidity
- Protection level IP67

## Pressure range table

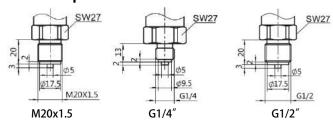
Nominal range	Description	
6kPa	Range upper and lower limit: -6…6kPa	Min. range; 1kPa
40kPa	Range upper and lower limit: -40…40kPa	Min. range: 2kPa
250kPa	Range upper and lower limit: -100…250kPa	Min. range 12.5kPa
1MPa	Range upper and lower limit: -0.1…1MPa	Min. range 50kPa
3MPa	Range upper and lower limit: -0.1…3MPa	Min. range 150kPa
10MPa	Range upper and lower limit: -0.1…10MPa	Min. range 500kPa
40MPa	Range upper and lower limit: -0.1…40MPa	Min. range 5MPa

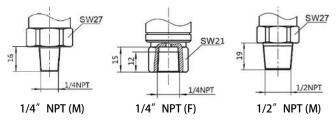
Note:

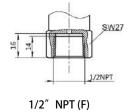
Set the upper and lower limit value requirements: The lower limit value (LRV) and the upper limit value (URV) within the range of upper and lower limits, the minimum range  $\leq$  | URV-LRV |  $\leq$  upper range limit

### **Dimensions**

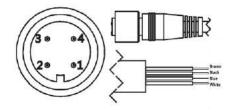
# Thread specifications



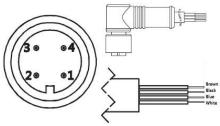




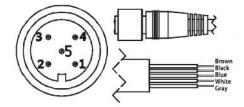
### **Electrical connector**



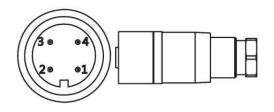
4-pin aviation plug straighter with 2M cable



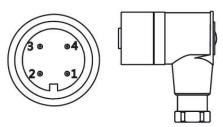
4-pin aviation plug elbow with 2M cable



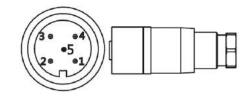
5-pin aviation plug straighter with 2M cable



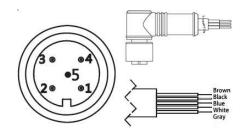
4-pin aviation plug straighter without cable



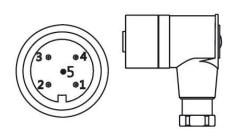
4-pin aviation plug elbow without cable



5-pin aviation plug straighter without cable



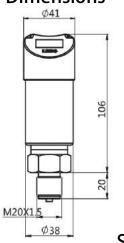
5-pin aviation plug elbow with 2M cable

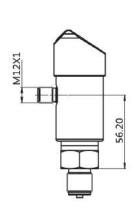


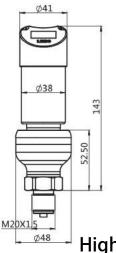
5-pin aviation plug elbow without cable

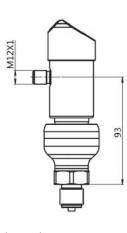


# Dimensions









Standard structure

High load structure

# How to order DPS-L131 Digital Pressure Switch

DP3-L13	T Digital Pro	essure Si	witch							
Std.	Spec.	Code	ltem	Code	ltem	Code	ltem	Code	ltem	
S	Structure	S	Standard	Н	High load	_	_	_	_	
	Structure	,	structure		structure					
		4.6	C1 12"	26	C1 /4"	401 (04)	4 /2// NIDT (AA)	401 (5)	1 /2" NDT /E)	
4G	Pressure	4G	G1/2"	2G	G1/4"	4N (M)	1/2" NPT (M)	4N (F)	1/2" NPT (F)	
	connection	2N (M)	1/4" NPT (M)	2N (F)	1/4" NPT (F)	M20	M20x1.5	_	_	
			A min avriation		4		C min avriation		1	
		J1	4-pin aviation	J2	4-pin aviation	J3	5-pin aviation	J4	4-pin aviation plug	
	Electrical		plug straighter with 2M cable	JZ	plug elbow with 2M cable	JS	plug straighter with 2M cable	J <del>4</del>	straighter without cable	
J1	connector		4-pin aviation		5-pin aviation		5-pin aviation			
	connector	J5	plug elbow	J6	plug straighter	J7	plug elbow	J8	5-pin aviation plug	
			without cable		without cable		with 2M cable		elbow without cable	
									l .	
		Gauge pressure – (0···6kPa to 10MPa)								
C	Pressure		nd pressure – (-0.							
Custom	range	Negative	e pressure – (-20 to	o 0kPa)						
	ì	Sealed p	ressure – (0 to 40)	MPa)						
G	Pressure	G	Gauge pressure	С	Compound	V	Negative	S	Sealed pressure	
	type	J	Gauge pressure		pressure	J	pressure	,	Scaled pressure	
								1		
304	Connection	304	SS304	316	SS316	0	Others	_	_	
	material									
	Diambon one									
316	Diaphragm	316	SS316	HC	Hastelloy C	_	_	_	_	
	material				·					
	Signal									
FN	output	FN	4-20mA+NPN	FP	4-20mA+PNP	_	_	_	_	
	output									
	Contacts		<u> </u>	_	<b>-</b> .	_				
1	number	1	One set	2	Two set	_	_	_	_	
									•	
V	Screen	N	N.	Υ	LED diamlass					
Υ	display	N	No	ľ	LED display			_	_	
N	RS485	N	No	Υ	RS485	_	_	_		
11	output	14	140	•	113-103					
									1	
	Contact	1411								
A1	alarm	W1	Custom setting	A1	Factory setting	_	_	_	_	
	setting									
			l aa.: el		Himbon di					
L1	Alarm method		Lower than	H1	Higher than		Alarmina in		Alarmina aut	
		L1	alarm value,		alarm value,	C1	Alarming in window	C2	Alarming out window	
			output high electrical level		output high electrical level		willdow		willdow	
			electrical level		electrical level				1	
		/A Third party notarized documents			/B	Inspection report				
/D		/A /C	Tag			/D	Specify factory set pressure alarm value			
	Other requests	/E	Heat exchange connector - condenser tube			/F	Heat exchange connector - cooling fin			
		/G	M20x1.5 female thread welded adapter			/H	G1/2" female thread welded adapter			
		/G /I	Electrolytic polishing liquid contact portion			/II —	-			
			4C 11 01MD2 C 204 216 FN					A1 11 /D		

Order example: <u>DPS-L131- S - 4G - J1 - 0···1MPa - G - 304 - 316 - FN - 1 - Y - N - A1 - L1</u>+/D