

Main Specifications

▼Product type

70C (Compound pressure)
70V (Vacuum pressure)
70P (Positive pressure)
For details please refer to technical specification table

▼Size

30*30mm

▼Pressure connection

For details please refer to pressure connection table

▼Pressure type

Positive pressure
Vacuum pressure
Compound pressure

▼Pressure range

For details please refer to technical specification table

▼Applicable fluid

Filtered air, non-corrosive, and non-flammable gas

▼Operation temperature

0~50°C

▼Storage temperature

-10~60°C

(Non-condensation or freezing)

▼Ambient humidity

35~85%RH (Non-condensation)

▼Temperature error

Standard temp.: 25°C
max. error: ±2.5%F.S. (0~50°C)

▼Protection level

IP40

▼Vibration

Total amplitude 1.5mm or 10G,
10Hz-55Hz-10Hz scan for 1
minute, 3 axes for 2hours

▼Shockproof

100m/s² (10G), 3 axes for 3
times

▼Lead wire

Oil-resistance PVC cable
(0.15mm²)

▼Accessories (Option)

BT-12 mounting bracket
BT-13 mounting bracket
PA-C panel adapter
PA-D panel adapter + front
protective lid

Other Specifications

▼Screen display

4-digit, 7 segment LCD display
2 colors (Red & Green) display
for main display
Orange for sub-display
(Switchable sampling rate:
0.2, 0.5, 1 sec./time)

▼Output type

(NPNx1 / PNPx1)
+RS485 Modbus RTU/ASCII

▼Pressure unit

kPa, MPa, kgf/cm², bar, psi,
inHg, mmHg

▼Power supply voltage

12 to 24VDC ±10%
Ripple (P-P) 10% or less

▼Supply voltage

NPN: 30VDC
PNP: 24VDC

▼Switch ON indicator

Orange (1 indicator) OUT1

▼Current consumption

≤40mA (With no load)

▼Max. load current

125mA

▼Residual voltage

≤1.5V

▼Indicator accuracy

±2%F.S., ±1 digit
(Ambient temp.: 25±3°C)

▼Response time

≤2.5ms
(Switchable chattering-proof
function: 25ms, 100ms, 250ms,
500ms, 1000ms, 1500ms,
2000ms, and 5000ms)

▼Hysteresis (Include one set
point mode, hysteresis mode,
window comparator mode)
Adjustable(*1)

▼Withstand voltage

1000VAC in 1 min (between
case and wire)

▼Insulation resistance

50MΩ (at 500VDC, between
case and wire)

▼Weight

About 80g (with 2m lead wire)

Mini Air Digital Pressure Gauge

Model: DPG-A70 series

Introduction

DPG-A70 mini air digital pressure gauge has 3 product types available (compound / vacuum / positive pressure), adopts 4-digit, 7 segment LCD display with 2 colors (red & green) for main display, and orange for sub-display. It is suitable for limited places and applicable to filtered air, non-corrosive and non-flammable gas measurement.



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

- OEM service
- 3 types of product available:
Compound / Vacuum / Positive pressure
- 4-digit, 7 segment LCD display,
multi-color display
- Output type:
NPNx1 + RS485 Modbus RTU/ASCII
PNPx1 + RS485 Modbus RTU/ASCII
- Small size, suitable for places with limited
places
- Applicable to filtered air, non-corrosive and
non-flammable gas measurement

(*1): Hysteresis value is adjustable within 1~8 digits for one point set mode and window comparator

Technical specification table

Pressure type		Compound pressure	Vacuum pressure	Positive pressure
Product type		70C	70V	70P
Rated pressure range		-100.0~100.0kPa	-101.3~0.0kPa	0.000~1.000MPa
Set pressure range		-101.0~101.0kPa	-101.3~10.0kPa	-0.100~1000MPa
Withstand pressure		500kPa		1.5MPa
Set pressure resolution	kPa	0.1		-
	MPa	-		0.001
	kgf/cm ²	0.001		0.01
	bar	0.001		0.01
	psi	0.01		0.1
	inHg	0.1		-
	mmHg	1		-

Pressure connection table

Code	Male thread	Female thread
F1	R1/8"	M5
F2	1/8" NPT	#10-32UNF
F3	G1/8" (BSP)	M5

Screen display description

Station Setting Display

- Provide 0 ~ 255 station to set the sensor.



ID number display

Modes Display

- Three modes show on the screen.



Setting Value Easy Indication

- User can easily observe the setting value from sub-display.

Main/Sub-Display



Easy Unit Identification

- Conversion unit is on display and easy to read.

mmHg | inHg | psi | bar | kgf/cm² | MPa | kPa



2-Color Main Display

- User programmable color mode, for different setting conditions.



	500	500	100	100
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

OPS Quick Setting

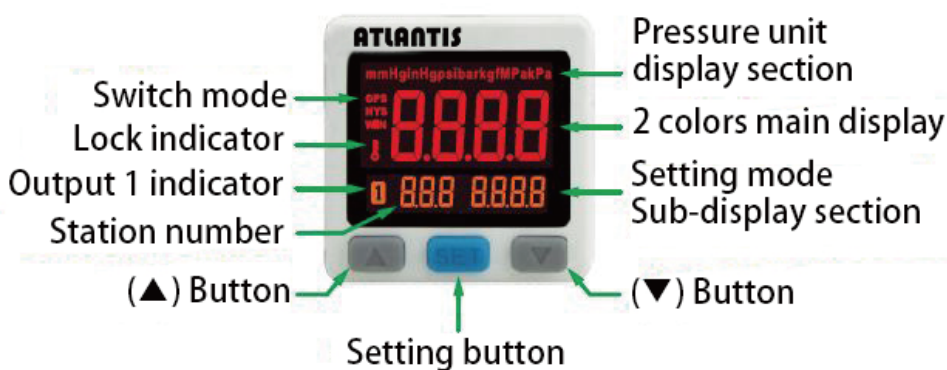
- Sub-display allows changing the parameter directly, reduce setting step by 3/4.

Up/Down quick setting

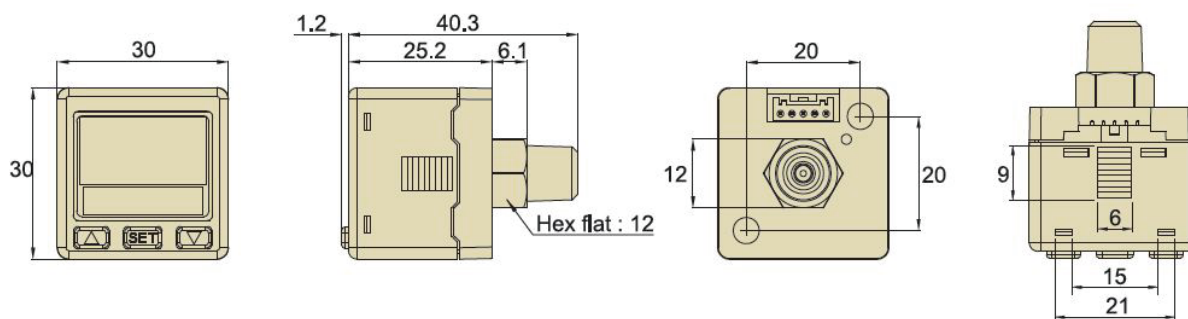
Finished setting



Panel description

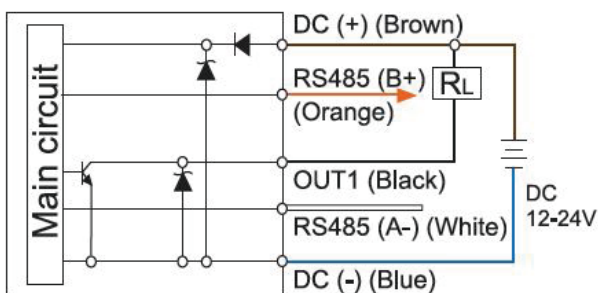


Dimensions (unit: mm)

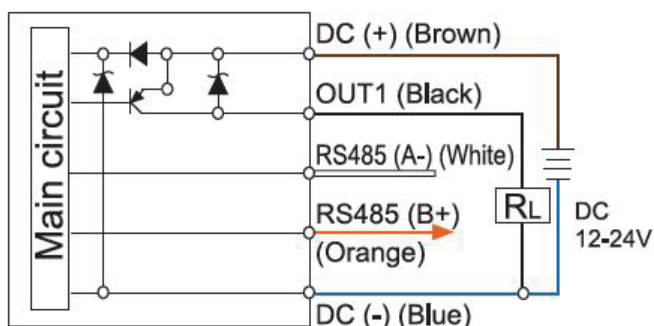


Output circuit wiring diagrams

NPN output + RS485

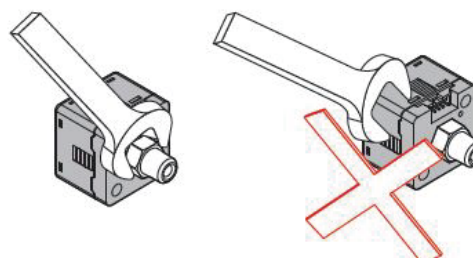


PNP output + RS485



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 damages to the port thread, mounting bracket and pressure sensor. Under tightening may result loosen or leakage.
- Apply pressure and power after installation and make necessary adjustments and inspect any possible signs of leakage to ensure proper installation.



Optional parts

Mounting bracket



■ BT-12 ■ BT-13

Panel adapter



■ PA-C

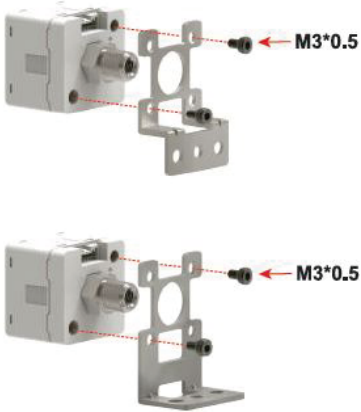
Panel adapter + Front protective lid



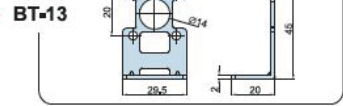
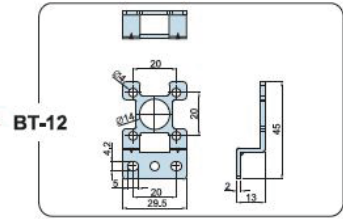
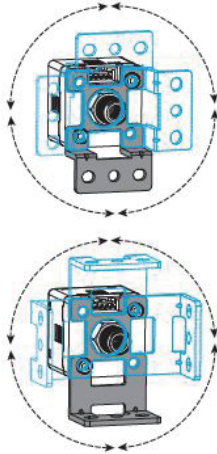
■ PA-D

Optional parts dimensions

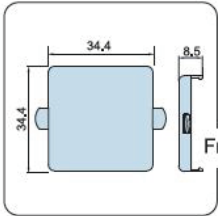
Mounting Bracket



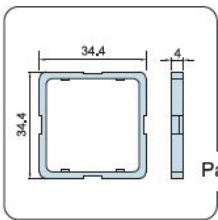
4 mounting directions available



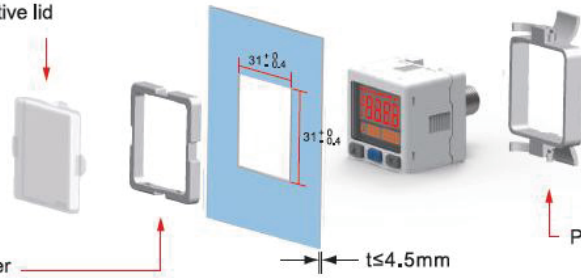
Panel Mount Adapter + Front Protective Lid



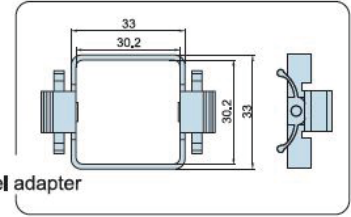
Front protective lid



Panel adapter



$t \leq 4.5\text{mm}$



Panel adapter

Unit:mm

How to order

DPG-A70		Mini Air Digital Pressure Gauge		
Code		Product type		
C		70C - Compound pressure		
V		70V - Vacuum pressure		
P		70P - Positive pressure		
Code		Pressure connection		
F1		R1/8" , M5		
F2		1/8" NPT, #10-32UNF		
F3		G1/8" (BSPP), M5		
Code		Output specification		
NPN		NPNx1 + RS485		
PNP		PNPx1 + RS485		
Code		Other requests		
/A		Third party notarized documents		
/B		Inspection report		
/C		Tag		
/D		BT-12 mounting bracket		
/E		BT-13 mounting bracket		
/F		PA-C panel adapter		
/G		PA-D panel adapter + front protective lid		
DPG-A70	C	F1	NPN	Order example: DPG-A70C-F1-NPN+/D