Main Specifications	Other 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℃ ▼Storage temperature -10~60℃ (Non-condensation or freezing) ▼Ambient humidity 35~85%RH (Non-condensation) ▼Temperature error Standard temp.: 25℃ max. error: ±2.5%F.S. (0~50℃) ▼Protection level IP40 ▼Vibration Total amplitude 1.5mm or 10G, 10Hz-55Hz-10Hz scan for 1 minute, 3 axes for 2hours ▼Shockproof $100m/s^2$ (10G), 3 axes for 3 times ▼Lead wire Oil-resistance PVC cable ($0.15mm^2$) ▼Accessories (Option) BT-12 mounting bracket BT-13 mounting bracket PA-C panel adapter PA-D panel adapter + front protective lid	▼Screen display 4-digit, 7 segment LED 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/cm^2, 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℃) ▼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)

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

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 LED 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 LED 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

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″ (BSPP)	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.

OPS
HYS
WIN

Setting Value Easy Indication
- User can easily observe the setting value from sub-display.

Main/Sub-Display

Main Display
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
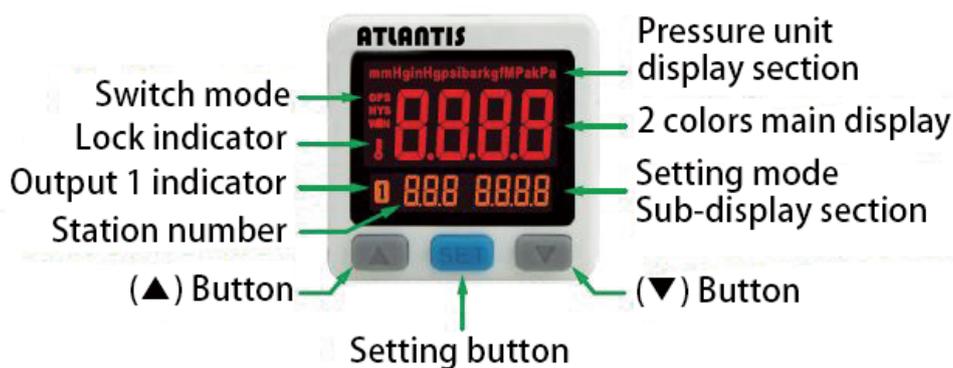- User programmable color mode, for different setting conditions.

	Sno	Sor	Grn	rEd
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red

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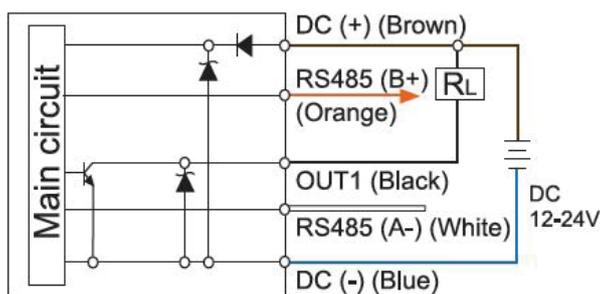- Sub-display allows changing the parameter directly, reduce setting step by 3/4.

Up/Down quick setting   Finished setting

Panel description

- Switch mode
- Lock indicator
- Output 1 indicator
- Station number
- (▲) Button
- Setting button
- Pressure unit display section
- 2 colors main display
- Setting mode Sub-display section
- (▼) Button

Dimensions (unit: mm)
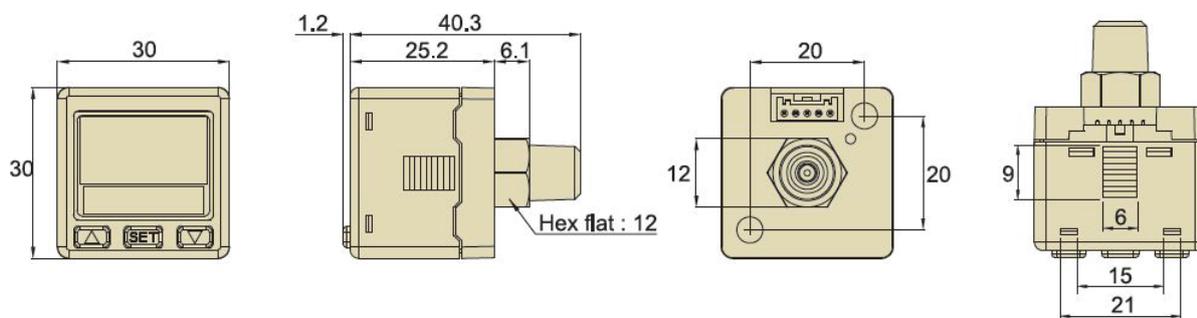
Output circuit wiring diagrams

NPN output + RS485

- DC (+) (Brown)
- RS485 (B+) (Orange)
- OUT1 (Black)
- RS485 (A-) (White)
- DC (-) (Blue)
- DC 12-24V

PNP output + RS485

- DC (+) (Brown)
- OUT1 (Black)
- RS485 (A-) (White)
- RS485 (B+) (Orange)
- DC (-) (Blue)
- DC 12-24V
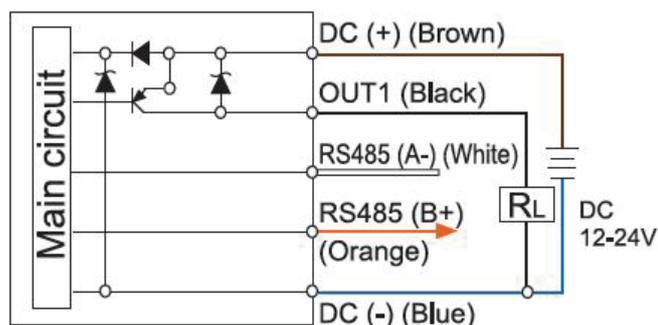
Installation precautions

- 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.
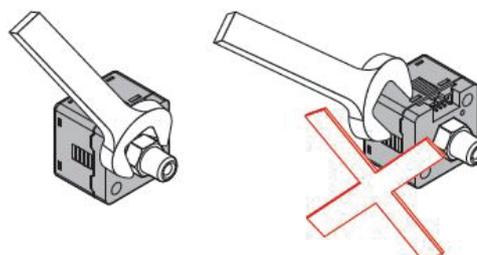
Optional parts

Mounting bracket

■ BT-12   ■ BT-13

Panel adapter

■ PA-C

Panel adapter + Front protective lid

■ PA-D

Optional parts dimensions

Mounting Bracket

M3*0.5

4 mounting directions available

BT-12

M3*0.5

BT-13
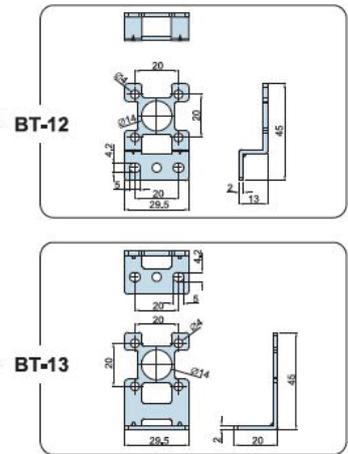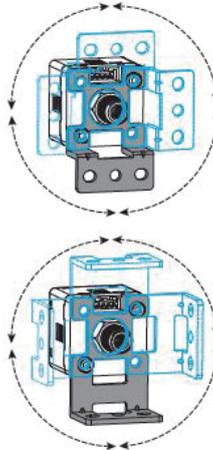
Panel Mount Adapter + Front Protective Lid

Front protective lid

Panel adapter

t≤4.5mm

Panel adapter

Unit:mm
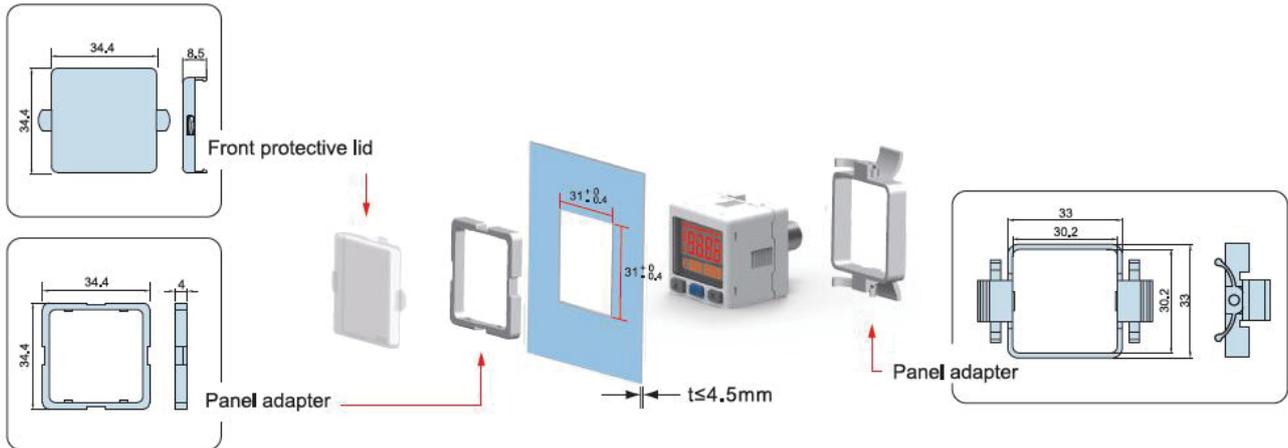
How to order

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		