



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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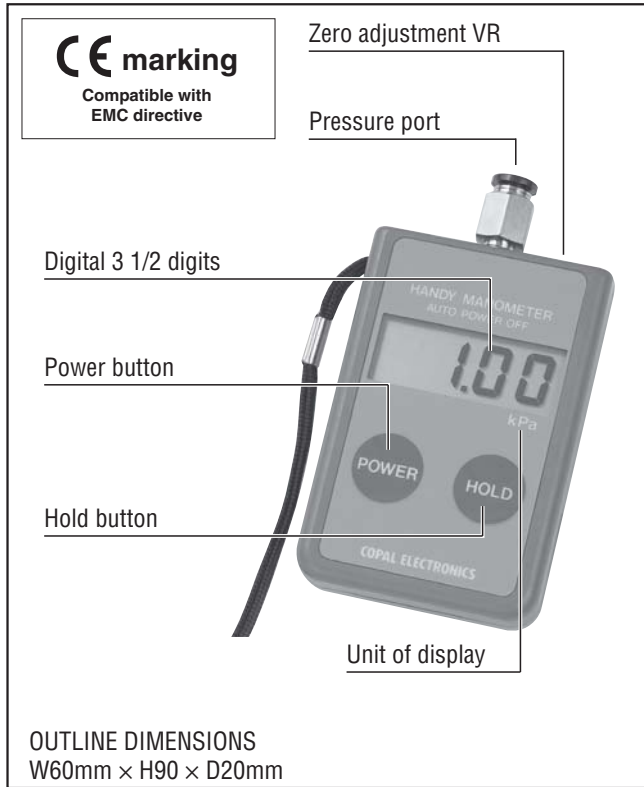
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HANDHELD DIGITAL MANOMETER PG-100



FEATURES

- **Excellent stability**
Pressure-sensitive element of semiconductor chip and circuit technology guarantees excellent temperature compensation.
- **Super long battery life**
A 3.6 V lithium battery incorporated has the long life to last over 3000 hours.
- **Automatic power off**
Automatic power off function works in approximately 3 minutes, which minimizes battery waste.
- **Handy size and easy one hand operation**
- **Easy reading with a large LCD display**
No reading error because of digital display with the holding function.
- **Meet EMC standard**
EN 55011 (EMI)
EN 50082-1 (EMS)

MODEL NUMBER DESIGNATION

P G - 100 - 102 G P

Series name

Rated pressure range

101 : 0 ~ 9.81 kPa (0 ~ 0.1 kgf/cm²) 0 ~ 10 kPa (When displayed in the unit of Pa)
 102 : 0 ~ 98.1 kPa (0 ~ 1 kgf/cm²) 0 ~ 100 kPa (When displayed in the unit of Pa)
 103 : 0 ~ 981 kPa (0 ~ 10 kgf/cm²) 0 ~ 1 MPa (When displayed in the unit of Pa)

Pressure reference

G : Gauge
 GH : Gauge
 VH : Gauge (Vacuum)
 AH : Absolute
 GP : Gauge
 Pa unit display
 GMP : Gauge
 (103 type only)
 Pa unit display
 RP : Gauge (Compound pressure)
 Pa unit display
 VP : Gauge (Vacuum)
 Pa unit display
 AP : Absolute
 Pa unit display

※ Please refer to the LIST OF MODEL NUMBERS when placing orders.

PG-100

HANDHELD DIGITAL MANOMETER

LIST OF MODEL NUMBERS

<Pa version>

Pressure reference	Gauge				Absolute
Rated pressure range kPa	0 ~ 10	0 ~ 100	0 ~ 1000	0 ~ - 100	100 kPa abs
Unit of display	kPa				
Part number	PG-100-101GP	PG-100-102GP	PG-100-103GP	PG-100-102VP	PG-100-102AP
Unit of display	MPa				
Part number			⤵ PG-100-103GMP		

The GMP version, marked ⤵ is manufactured upon receipt of order basis.

<Compound pressure version>

Pressure reference	Gauge		
Rated pressure range kPa	- 10 ~ 10	- 100 ~ 100	- 100 ~ 1000
Unit of display	kPa		
Model number	PG-100-101RP	PG-100-102RP	PG-100-103RP

<Non SI unit version>

Pressure reference	Gauge					Absolute
kPa {kgf/cm ² } Rated pressure range	0 ~ 9.81 {0 ~ 1000 mmH ₂ O}	0 ~ 98.1 {0 ~ 1}	0 ~ 981 {0 ~ 10}	0 ~ - 98.1 {0 ~ - 735 mmHg}	0 ~ 98.1 {0 ~ 735 mmHg}	0 ~ 98.1 kPa abs {0 ~ 735 mmHg abs}
Unit of display	mmH ₂ O	kgf/cm ²		mmHg		
Part number	⤵ PG-100-101G	⤵ PG-100-102G	⤵ PG-100-103G	⤵ PG-100-102VH	⤵ PG-100-102GH	⤵ PG-100-102AH

☐: Not available

※ Verify the above model numbers when placing orders.

Marked ⤵ is manufactured upon receipt of order basis.

<Option>

- The soft carrying case for PG-100 – Order item: PG-100 soft carrying case (Useful for when carrying out and keeping.)
- DC3.6 V lithium battery – Order item: Lithium battery (The battery is an expendable item. The first one is provided with the unit.)



The soft carrying case for PG-100 (Option)

PG-100

HANDHELD DIGITAL MANOMETER

STANDARD SPECIFICATIONS

<Pa version>

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C.

Item		PG-100					
General specifications	Pressure reference	Gauge				Absolute	
	Model number	101GP	102GP	103GP 103GMP	102VP	102AP	
	Rated pressure range	kPa	10	100	1000	- 100	100 kPa abs
	Maximum pressure	kPa	20	200	1500	200	200 kPa abs
	Break-down pressure	kPa	50	500	2000	500	500 kPa abs
	Operating temp. range	°C	0 ~ 50				
	Compensated temp. range	°C	0 ~ 50				
	Operating humidity	% RH	35 ~ 85 (No condensation)				
	Storage temp.	°C	- 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)				
	Pressure medium		Non-corrosive gases				
	Pressure port		M 5 female				
	Net weight	g	Approx. 85				
	Power		Lithium battery DC3.6 V Battery life 3000 h minimum				
Display	No. of digits	3 1/2					
	Display element	LCD					
	Rated display range	※	0.00 ~ 10.00	00.0 ~ 100.0	000 ~ 1000 .000 ~ 1.000 (MPa)	00.0 ~ - 100.0	00.0 ~ 100.0 (kPa abs)
	Display cycle		Approx. 3 times/s				
	Display accuracy	maximum	± 0.5 %F.S. ± 2 counts (at 25 °C ± 5 °C)				
	Thermal error	ZERO maximum	± 0.1 %F.S./°C ± 2 counts	± 0.05 %F.S./°C ± 2 counts			± 0.1 %F.S./°C ± 2 counts
		SPAN	± 0.05 % Reading/°C ± 2 counts				
Resolution		1 count					
Additional function		Auto power off (3 min), Display hold, Battery replacement display					
Accessories		Attachments : Half union (for a tube of $\varphi 6$ O.D.), and Barb fitting (for a tube of $\varphi 4$ I.D.), one piece each.					

※ The value out of rated pressure range can be displayed, but the accuracy is not guaranteed.

PG-100

HANDHELD DIGITAL MANOMETER

STANDARD SPECIFICATIONS

<Compound pressure version>

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C.

Item		PG-100			
General specifications	Pressure reference	Gauge			
	Model number	101RP	102RP	103RP	
	Rated pressure range	kPa – 10 ~ 10	– 100 ~ 100	– 100 ~ 1000	
	Maximum pressure	kPa 20	200	1500	
	Break-down pressure	kPa 50	500	2000	
	Operating temp. range	°C	0 ~ 50		
	Compensated temp. range	°C	0 ~ 50		
	Operating humidity	% RH	35 ~ 85 (No condensation)		
	Storage temp.	°C	– 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)		
	Pressure medium		Non-corrosive gases		
	Pressure port		M 5 female		
	Net weight	g	Approx. 100		
	Power		Lithium batteryDC3.6 V Battery life 3000 h minimum		
Display	No. of digits	3 1/2			
	Display element	LCD			
	Rated display range	– 10.00 ~ 10.00	– 100.0 ~ 100.0	– 100 ~ 1000	
	Display cycle	Approx. 3 times/s			
	Display accuracy (at 25 °C ± 5 °C)	± 1 %F.S. ± 2 counts	± 0.5 %F.S. ± 2 counts		
	Thermal error	ZERO maximum	± 0.1 %F.S./°C ± 2 counts	± 0.05 %F.S./°C ± 2 counts	
		SPAN	± 0.05 % Reading/°C ± 2 counts		
Resolution		1 count			
Additional function		Auto power off (3 min), Display hold, Battery replacement display			
Accessories		Attachments : Half union (for a tube of φ 6 O.D.), and, Barb fitting (for a tube of φ 4 I.D.), one piece each.			

PG-100

HANDHELD DIGITAL MANOMETER

STANDARD SPECIFICATIONS

<Non SI unit version>

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C.

Item		PG-100					
General specifications	Pressure reference	Gauge					Absolute
	Model number	101G	102G	103G	102VH	102GH	102AH
	Rated pressure range	kPa {kgf/cm ² } 9.81 {1000 mmH ₂ O}	98.1 {1}	981 {10}	- 98.1 {- 735 mmHg}	98.1 {735 mmHg}	98.1 kPa abs {735 mmHg abs}
	Maximum pressure	kPa {kgf/cm ² } 19.6 {2000 mmH ₂ O}	196 {2}	1471 {15}	196 {1471 mmHg}		196 kPa abs {1471 mmHg abs}
	Break-down pressure	kPa {kgf/cm ² } 49.0 {5000 mmH ₂ O}	490 {5}	1961 {20}	490 {3678 mmHg}		490 kPa abs {3678 mmHg abs}
	Operating temp. range	°C	0 ~ 50				
	Compensated temp. range	°C	0 ~ 50				
	Operating humidity	% RH	35 ~ 85 (No condensation)				
	Storage temp.	°C	- 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)				
	Pressure medium		Non-corrosive gases				
	Pressure port		M 5 female				
	Net weight	g	Approx. 100				
	Power		Lithium battery DC3.6 V Battery life 3000 h minimum				
Display	No. of digits	3 1/2					
	Display element	LCD					
	Rated display range	000 ~ 1000 mmH ₂ O	.000 ~ 1.000 kgf/cm ²	0.00 ~ 10.00 kgf/cm ²	000 ~ - 735 ※1 mmHg	000 ~ 735 ※1 mmHg	000 ~ 735 ※1 mmHg
	Display cycle	Approx. 3 times/s					
	Display accuracy	maximum	± 0.5 %F.S. ± 2 counts (at 25 °C ± 5 °C)				
	Thermal error	ZERO maximum	± 0.1 %F.S./°C ± 2 counts	± 0.05 %F.S./°C ± 2 counts			± 0.1 %F.S./°C ± 2 counts
		SPAN	± 0.05 % Reading/°C ± 2 counts				
Resolution		1 count					
Additional function		Auto power off (3 min), Display hold, Battery replacement display					
	Accessories	Attachments : Half union (for a tube of φ 6 O.D.), and Barb fitting (for a tube of φ 4 I.D.), one piece each.					

※1 Measurement can be made up to “- 760 mmHg” for 102VH and up to “760 mmHg” for 102GH and 102AH (Accuracy not guaranteed beyond the rated pressure).

PG-100

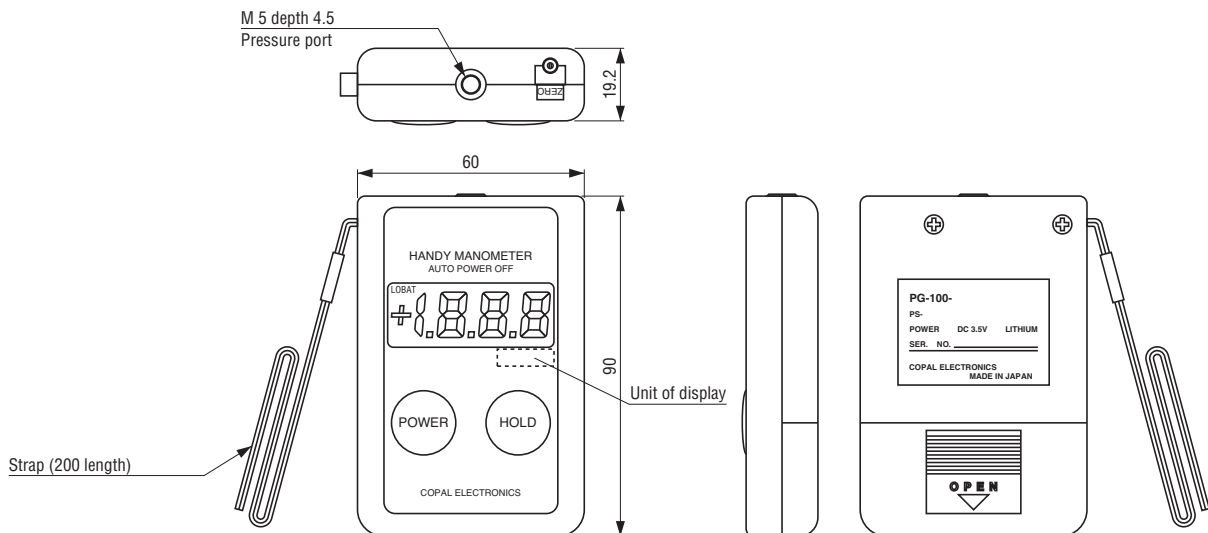
HANDHELD DIGITAL MANOMETER

ENVIRONMENTAL CHARACTERISTICS

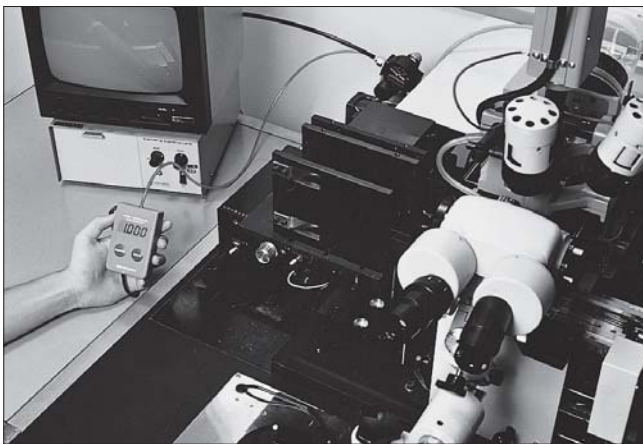
Test item	Test conditions (At 25 ± 5 °C)	Permissible change
Vibration	Amplitude 1.5 mm P-P, 10 ~ 55 Hz, 3 directions for 2 hours each (packed)	Indicating accuracy: ± 1 %F.S. maximum
Shock	98.1 m/s ² , 3 directions for 3 times each (packed)	
Pressure cycling	0 ~ Rated pressure, 10 ⁶ cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	
EMC	EMI: EN 55011 Group 1, class B EMS: EN 50082-1 (1992)	

OUTLINE DIMENSIONS

Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)



EXAMPLE OF APPLICATIONS



▲ Measurement of air pressure for a automatic machinery.



▲ Measurement of source pressure from a compressor.