# MANOMETER 7000 mbar

Model: PM-9117SD *ISO-9001, CE, IEC1010* 









The Art of Measurement

## SD card real time data recorder 7000 mbar, differential input

## **MANAOMETER**

Model: PM-9117SD

#### **FEATURES**

* Dual & differential input, 7000 mbar max. range.
* Application : Industrial, laboratory, heating,
ventilation, medical hospital, used for air or not
corrosive and not ionized gas & liquid.
* Sensor is built inside the housing.
* Single lugs for pipe connection.
* 10 kind display units ( mbar, psi, Kg/cm^2 , mm Hg,
inch Hg, meter H2O, inch H2O, Atmosphere, hpa, kpa)
select by push button on the front panel
* Auto shut off saves battery life.
* Zero button on the front panel, easy to offset the zero
value.
* Microprocessor circuit assures maximum possible accuracy,
provides special functions and features,
* Super large LCD display with contrast adjustment for best
viewing angle.
* setup extra software, after execute datalogger, just take
away the SD card from the meter and plug in the SD card
into the computer, it can down load the all the measured
value with the time information ( year/month/date/
hour/minute/second ) to the Excel directly, thenuser can
make the further data or graphic analysis by themselves.
* SD card capacity : 1 GB to 16 GB.
* LCD with green light backlight, easy reading.
* It can default auto power off or manual power off.
* Data hold, record max. and min. reading.
* Microcomputer circuit, high accuracy.
* Power by UM3/AA ( 1.5 V ) x 6 batteries or DC 9V adapter.
* RS232/USB PC COMPUTER interface.

### 1 GENERAL SPECIFICATIONS

GENERAL SPE				
Circuit	Custom one-chip of microprocessor LSI			
	circuit.			
Display	LCD size: 61 mm x 34 mm			
		green backlight ( ON/OFF ).		
Display units	psi, inch Hg, inch H2O, hPA, KPA, mbar,			
	Kg/cm^2	2, mm Hg, meter H2O, Atmosphere.		
Measurement	Dual & differential input, data hold,			
Function	zero/relative, memory.			
Zero adjust	Push button on the front panel.			
Sensor	* Sensor	is built inside the housing.		
	* Piezoe	lectric sensor.		
	* Used f	or dry, non-corrosive and		
		nic air and gas only.		
	Liquid	is prohibited.		
Datalogger	Auto	1 sec to 3600 sec.		
Sampling Time		@Sampling time can set to 1 second,		
Setting range		but memory data may loss.		
0 0	Manual	Push the data logger button		
		once will save data one time.		
		@ Set the sampling time to		
		0 second.		
		@ Manual mode, can also select the		
		1 to 99 position (Location) no.		
Memory Card	SD mem	ory card. 1 GB to 16 GB.		
Advanced	* Set clo	ock time		
setting	(Year/Month/Date,Hour/Minute/ Second )			
	* Set sampling time			
	* Auto p	power OFF management		
	* Set beep Sound ON/OFF			
		al point of SD card setting		
		emory card Format		
Data Hold		ne display reading.		
Memory Recall	Maximun	n & Minimum value.		
Sampling Time	Approx.	1 second.		
of Display	''			
7	Meter	0 to 50 ℃.		
Temperature	Probe	0 to 60 ℃.		
Operating	Less than	n 85% R.H.		
Humidity				

Data Output  Power Supply	RS 232/USB PC computer interface.  * Connect the optional RS232 cable UPCB-02 will get the RS232 plug.  * Connect the optional USB cable USB-01 will get the USB plug.  * Alkaline or heavy duty DC 1.5 V battery
rower suppry	( UM3, AA ) x 6 PCs, or equivalent.  * DC 9V adapter input. ( AC/DC power adapter is optional ).
Power Current	Normal operation ( w/o SD card save data and LCD Backlight is OFF) : Approx. DC 7 mA. When SD card save the data and LCD Backlight is OFF) : Approx. DC 25 mA. * If LCD backlight on, the power consumption will increase approx. 10 mA
Weight	265 g/0.59 LB.
Dimension	190 x 68 x 45 mm (7.5 x 2.7x 1.8 inch)
Accessories Included	* Instruction manual 1 PC. * Hard carrying case 1 PC. * PLug for quick coupler 2 PCs.
Optional Accessories	SD memory card ( 4 GB ) AC to DC 9V adapter. USB cable, USB-01. RS232 cable, UPCB-02. Data Acquisition software,SW-U801-WIN.

ELECTRICAL SPECIFICATIONS (23±5 °C)

ELECTRICAL SPECIFICATIONS (23±5 C)				
Unit	Max. range		Resolution	
mbar	±7000	mbar	5	mbar
psi	±101.5	psi	0.05/0.1	psi
Kg/cm^2	±7.135	Kg/cm^2	0.005	Kg/cm^2
mm Hg	±5250	mm Hg	5	mm Hg
inch Hg	±206.7	inch Hg	0.1	inch Hg
meter H2O	±71.35	meter H2O	0.05	meter H2O
h PA	±7000	h PA	5	inch H2O
K PA	±700	K PA	0.5	Atmosphere
inch H2O	±2810	inch H2O	2	inch H2O
Atmosphere	±6.905	Atmosphere	0.005	Atmosphere

Unit	Max. ra	nge	Accuracy
mbar	±7000	mbar	± 2 % F.S.
psi	±101.5	psi	
Kg/cm^2	±7.135	Kg/cm^2	Note:
mm Hg	±5250	mm Hg	] *23 ± 5 ℃ .
inch Hg	±206.7	inch Hg	* F.S. : full scale
meter H2O	±71.35	meter H2O	* Included linearity,
h PA	±7000	h PA	hysteresis and
K PA	±700	K PA	repeatability
inch H2O	±2810	inch H2O	
Atmosphere	±6.905	Atmosphere	

#### Remark :

Measuring unit	Display unit
psi	Psi
inch Hg	in/Hg
inch H2O	inch H2O
h PA	h PA
KPA	- PA
mbar	- bar
Kg/cm^2	- g /cm2
mm Hg	/Hg
meter H2O	- H2O
Atmosphere	АТР

<sup>\*</sup> Appearance and specifications listed in this brochure are subject to change without notice.