

# Pressure Meters



## Features - DPM 2300 Series

- ◆ Large Graphics Display With Cursor Selection Of Options And Setup
- ◆ High Resolution 24 Bit Measurement
- ◆  $\pm 0.05\%$  FS Pressure Accuracy
- ◆ Standard Pressure Scales Include 13 Different Engineering Unit Ranges  
*(PSI, mmHg@0 °C, mmHg@20 °C, inHg@0 °C, inHg@20 °C, cmH<sub>2</sub>O@20 °C, inH<sub>2</sub>O@4 °C, inH<sub>2</sub>O@20 °C, inH<sub>2</sub>O@60 °F, kg/cm<sup>2</sup>, kPa, mBar, Bar)*
- ◆ MAX And MIN Pressure Value Capture And Storage
- ◆ Digital Calibration
- ◆ Selectable Display Options & Digit Sizes
- ◆ Battery Life Display (0 To 100%)
- ◆ Programmable Digital Averaging Filter
- ◆ Display Contrast Is Software Adjustable
- ◆ Digital Zero Adjustment

## DPM-2302 Adds:

- ◆ RS-232 Serial Communications

## Second Pressure Sensor Adds:

- ◆ Independent Pressure Channel
- ◆ Separate And Combined Display Option

## Temperature Option Adds:

- ◆ YSI 700 or 100  $\Omega$  RTD Temperature Probe Interface
- ◆ -20.0 to 100.0 °C (-4.0 to 212.0 °F) Range
- ◆  $\pm 0.5\%$  FS Accuracy

## Analog Output Option Adds:

- ◆ DC Output Proportional to the Displayed Pressure or Temperature
- ◆  $\pm 0.1\%$  FS Output Accuracy





## DPM-2300

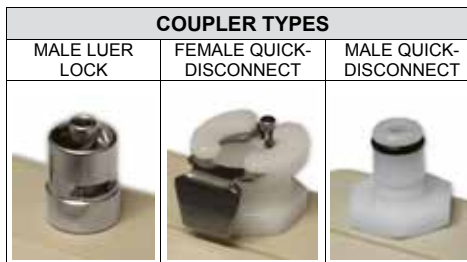
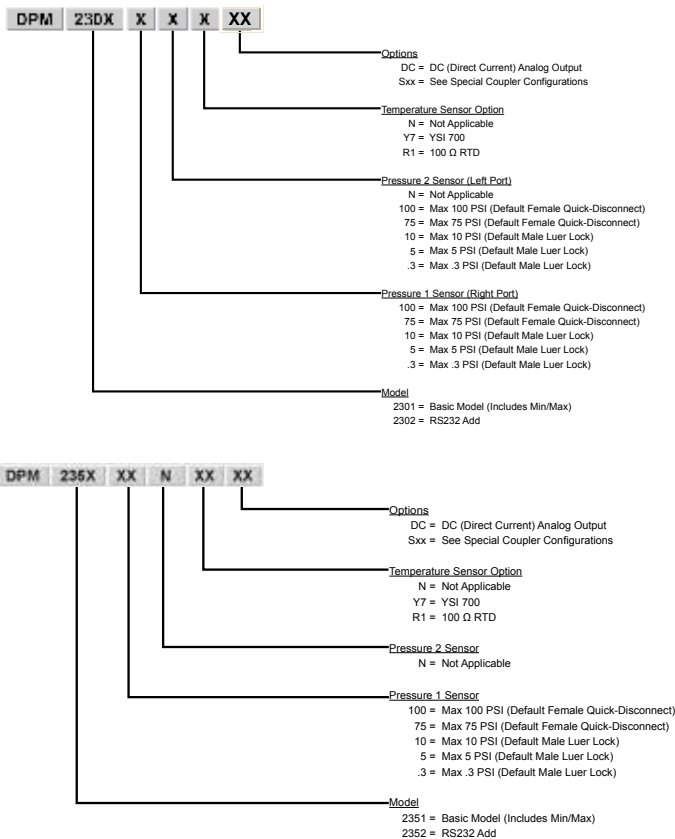
The DPM-2300 Series is a microprocessor-based, High Precision, High Resolution Digital Pressure Meter Family. These meters measure both gas and liquid pressures and provide multiple engineering unit displays for the results. The unit may have one or two pressure sensors and an optional temperature sensor input to measure pressure and temperature all in one meter.

There are five standard pressure ranges. Models are available with any combination of ranges. The DPM-2350 Subset provides a differential pressure option using a single sensor in any of the five ranges. Optional features allow the addition of RS-232 communication, temperature measurement and DC Analog Outputs.

# SPECIFICATIONS

PRESSURE MEASUREMENT (GAUGE)		
RANGE	100 PSI SENSOR	-13.5 to 100.0 PSI
	75 PSI SENSOR	-13.5 to 75.0 PSI
	10 PSI SENSOR	-10.0 to 10.0 PSI
	5 PSI SENSOR	-5.0 to 5.0 PSI
	0.3 PSI SENSOR	-0.3 to 0.3 PSI
RESOLUTION	100 PSI SENSOR	0.001 PSI
	75 PSI SENSOR	0.001 PSI
	10 PSI SENSOR	0.0001 PSI
	5 PSI SENSOR	0.0001 PSI
	0.3 PSI SENSOR	0.00001 PSI
MAXIMUM OVERPRESSURE	100 PSI SENSOR	200 PSI
	75 PSI SENSOR	200 PSI
	10 PSI SENSOR	45 PSI
	5 PSI SENSOR	15 PSI
	0.3 PSI SENSOR	5 PSI
ACCURACY	± 0.05% FS	
DIGITAL FILTER	0 to 10 seconds, Selectable	
COMPATIBLE MEDIA	Only non-corrosive, non-ionic, or otherwise pure fluids and/or gases that are compatible with sensor materials including glass, silicon, ceramic, epoxy, RTV, gold, aluminum and nickel.	
CONNECTIONS	See Model Number Breakdown	
PHYSICAL & ENVIRONMENTAL		
DISPLAY	128 X 64 Pixels Non-Backlit Graphical LCD	
CONSTRUCTION	ENCLOSURE	ABS Plastic
	OVERLAY	Back-printed Lexan
SIZE	7.69 x 3.97 x 1.80 Inches (195.3 x 100.8 x 45.7 mm)	
WEIGHT	< 1 Lbs (0.45 kg)	
OPERATING RANGE	15 to 30 °C (59 to 86 °F)	
STORAGE RANGE	-40 to 60 °C (-40 to 140 °F)	
ELECTRICAL & MISC.		
BATTERY	9V Alkaline Battery (ANSI/NEDA 1604A or equivalent)	
BATTERY ELIMINATOR	9 VDC, 200 mA 	
	BC20-21110 BATTERY ELIMINATOR ( UNIVERSAL)	
POWER CONSUMPTION	ON	< 35 mA
	OFF	< 40 µA
BATTERY LIFE	CONTINUOUS	80 hours
	OFF	1 year
RS-232 COMMUNICATIONS	BAUD	115200
	DATA BITS	8
	START BITS	1
	STOP BITS	1
	PARITY	None
	HANDSHAKING	None
	CONNECTIONS	Seven (7) pin Mini-DIN Receptacle Pinout:  NOTE: As Viewed from Unit Exterior

# MODEL SUMMARY



SPECIAL COUPLER CONFIGURATIONS		
Option	Pressure 1 Coupler (Right Port)	Pressure 2 Coupler (Left Port)
S01	Female Quick-Disconnect	Female Quick-Disconnect
S02	Female Quick-Disconnect	Male Quick-Disconnect
S03	Female Quick-Disconnect	Male Luer Lock
S04	Female Quick-Disconnect	Not Applicable
S05	Male Quick-Disconnect	Female Quick-Disconnect
S06	Male Quick-Disconnect	Male Quick-Disconnect
S07	Male Quick-Disconnect	Male Luer Lock
S08	Male Quick-Disconnect	Not Applicable
S09	Male Luer Lock	Female Quick-Disconnect
S10	Male Luer Lock	Male Quick-Disconnect
S11	Male Luer Lock	Male Luer Lock
S12	Male Luer Lock	Not Applicable

### SPECIAL MODEL:

Recommended model for use with TSI Certifier-FA Respiratory Vent Test System:

**DPM-235175NNFC**  
or **DPM-23017510NFC**

# Pressure Meters



## Features - DPM-2200 Series

- ◆ Single or Dual Pressure Sensors
- ◆ Large Graphics Display with Cursor Selection of Options & Parameters Setup
- ◆  $\pm 0.05\%$  FS Pressure Accuracy
- ◆ 16 Bit Measurement
- ◆ Standard Pressure Scales Include 13 Different Engineering Unit Ranges (PSI, mmHg@0 °C, mmHg@20 °C, inHg@0 °C, inHg@20 °C, cmH<sub>2</sub>O@20 °C, inH<sub>2</sub>O@4 °C, inH<sub>2</sub>O@20 °C, inH<sub>2</sub>O@60 °F, kg/cm<sup>2</sup>, kPa, mBar, Bar)
- ◆ Digital Calibration & Zero Adjust
- ◆ Selectable Display Options & Digit Sizes
- ◆ Battery Life Display (0 to 100%)
- ◆ Programmable Digital Filter
- ◆ Display Contrast is Software Adjustable
- ◆ Flash Programmable, Field Upgradeable
- ◆ Optional DC or High Frequency (up to 100 Hz Cycle Rate) Outputs
- ◆ Pressure & Vacuum
- ◆ Liquids & Gases

## DPM-2202 Adds:

- ◆ Min/Max Pressure Value Capture and Storage
- ◆ RS-232 Serial Communications

## Second Pressure Sensor Adds:

- ◆ Independent Pressure Channel
- ◆ Separate & Combined Display Option

## Temperature Option Adds:

- ◆ YSI 700 or 100  $\Omega$  RTD Temperature Probe Interface
- ◆ -20.0 to 100.0 °C (-4.0 to 212.0 °F) Range
- ◆  $\pm 0.5\%$  FS Accuracy

## Analog Output Option Adds:

- ◆ Standard or High Frequency Output
- ◆ DC Output Proportional to the Displayed Pressure or Temperature
- ◆  $\pm 0.1\%$  FS Output Accuracy



## DPM-2200


The DPM-2200 Series is a Microprocessor-based, High Precision, Digital Pressure Meter Family. They measure both gas and liquid pressures and provide multiple engineering unit displays for the results. The unit may have one or two pressure sensors and an optional temperature sensor input to measure pressure and temperature all in one meter. Also standard & high frequency analog outputs options are available.

There are five standard pressure ranges. Models are available with any combination of ranges. The DPM-2250 Subset provides a differential pressure option using a single sensor in any of the five ranges. Optional features allow the addition of RS-232 communication, Temperature measurement and a standard or high frequency analog output.

# SPECIFICATIONS

PRESSURE MEASUREMENT (GAUGE)		
RANGE	100 PSI SENSOR	-13.5 to 100.0 PSI
	75 PSI SENSOR	-13.5 to 75.0 PSI
	10 PSI SENSOR	-10.0 to 10.0 PSI
	5 PSI SENSOR	-5.0 to 5.0 PSI
	0.3 PSI SENSOR	-0.3 to 0.3 PSI
RESOLUTION	100 PSI SENSOR	0.01 PSI
	75 PSI SENSOR	0.01 PSI
	10 PSI SENSOR	0.001 PSI
	5 PSI SENSOR	0.001 PSI
	0.3 PSI SENSOR	0.0001 PSI
ACCURACY	± 0.05% FS	
DIGITAL FILTER	0 to 10 seconds, Selectable	
COMPATIBLE MEDIA	Only non-corrosive, non-ionic, or otherwise pure fluids and/or gases that are compatible with sensor materials including glass, silicon, ceramic, epoxy, RTV, gold, aluminum and nickel.	
CONNECTIONS	Male Luer Coupler	

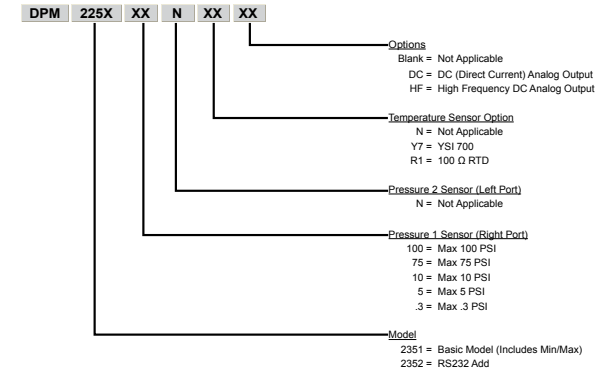
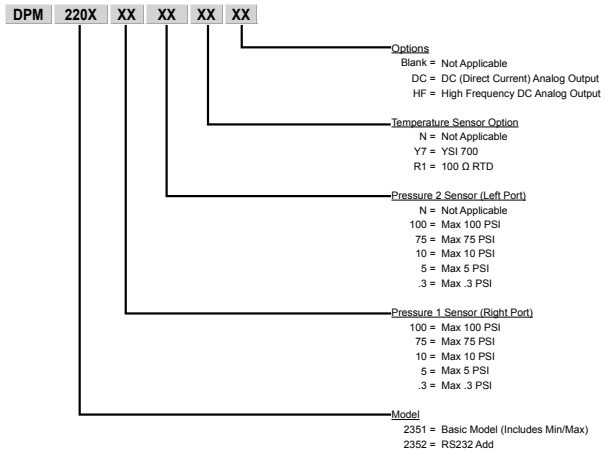
PHYSICAL & ENVIRONMENTAL		
DISPLAY	128 X 64 Pixels Non-Backlit Graphical LCD	
CONSTRUCTION	ENCLOSURE	ABS Plastic
	OVERLAY	Back-printed Lexan
SIZE	7.69 x 3.97 x 1.80 Inches (195.3 x 100.8 x 45.7 mm)	
WEIGHT	< 1 lbs (0.45 kg)	
OPERATING RANGE	15 to 30 °C (59 to 86 °F)	
STORAGE RANGE	-40 to 60 °C (-40 to 140 °F)	

ELECTRICAL & MISC.			
BATTERY	9V Alkaline Battery (ANSI/NEDA 1604A or equivalent)		
BATTERY ELIMINATOR	9 VDC, 200 mA		
	 BC20-21110 BATTERY ELIMINATOR ( UNIVERSAL)		
POWER CONSUMPTION	ON	< 35 mA	
	OFF	< 40 µA	
BATTERY LIFE	CONTINUOUS	80 hours	
	OFF	1 year	
RS-232 COMMUNICATIONS	BAUD	115200	
	DATA BITS	8	
	START BITS	1	
	STOP BITS	1	
	PARITY	None	
	HANDSHAKING	None	
	CONNECTIONS	Seven (7) pin Mini-DIN Receptacle Pinout:  NOTE: As Viewed from Unit Exterior	



DPM-2250

## MODEL SUMMARY



### OPTIONAL ACCESSORIES FOR DPM SERIES

- |              |  |
|--------------|--|
| BC20 - 21110 | BATTERY ELIMINATOR (UNIVERSAL)                       |
| BC20 - 41361 | RS-232 COMMUNICATION CABLE, USB(A)M TO MINI DIN MALE |
| BC20 - 30106 | BC BIOMEDICAL SMALL SOFT SIDED CARRYING CASE         |
| BC20 - 01005 | UNIVERSAL PRESSURE ADAPTER KIT                       |
| BC20 - 01006 | YSI TEMPERATURE PROBE                                |
| BC20 - 01008 | RTD (100 Ω) TEMPERATURE PROBE                        |

**EYE SURGERY EQUIPMENT USERS PLEASE NOTE:**  
 Recommended part number for DPM Pressure Meter when servicing Eye Surgery Equipment.  
**DPM-220210010NHF**

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Digital Pressure Meter Series

## Features - DPM-2000 Series

- ◆ Pressure Ranges:
  - 13.50 to 100.00 PSI
  - 701 to 5190 mmHg @ 20 °C
  - 951 to 7043 cmH<sub>2</sub>O @ 20 °C
  - 374 to 2773 inH<sub>2</sub>O @ 20 °C
- ◆ ± 0.1% FS Pressure Accuracy
- ◆ 5 Digit LCD Display
- ◆ Programmable Digital Filter
- ◆ Digital Calibration & Zero Adjust
- ◆ Male Luer Connector
- ◆ Battery Life Display (0 to 100%)
- ◆ Liquids & Gases

## DPM-2001PLUS Adds:

- ◆ Min/Max Value Capture
- ◆ RS-232 Serial Communications

## DPM-2100 Adds:

- ◆ YSI 700 Temperature Probe Interface
- ◆ 0.0 to 100.0 °C (32.0 to 212.0 °F) Range
- ◆ ± 0.5% FS Accuracy



## DPM-2001PLUS

The DPM-2000 Series is a Microprocessor-based Family of Meters that offers not only positive and negative pressure sensing of compatible liquids and gases, but also has models with Temperature and RS-232.

The DPM-2001 is the base model. The DPM-2001PLUS adds a "Min/Max" feature plus a RS-232 port. The top-of-the-line DPM-2100 is a pressure/temperature meter. It has all the features of the PLUS model and also includes a YSI 700 temperature probe interface.

Each model has a battery life display (0 to 100%), Software adjustable LCD contrast, digital calibration (no pots to turn), 0.1% of full scale accuracy, -13.50 to 100.00 PSI range, digital zero adjust and four pressure scales: PSI, inH<sub>2</sub>O, cmH<sub>2</sub>O and mmHg.

# SPECIFICATIONS

PRESSURE	
RANGE	-13.50 to 100.00 PSI -701 to 5190 mmHg @ 20 °C -374 to 2773 inH2O @ 20 °C -951 to 7043 cmH2O @ 20 °C
RESOLUTION	0.01 PSI 1 mmHg @ 20 °C 1 inH2O @ 20 °C 1 cmH2O @ 20 °C
MAXIMUM OVERPRESSURE	200 PSI
ACCURACY	± 0.1% FS
DIGITAL FILTER	1 – 255 samples
COMPATIBLE MEDIA	Only non-corrosive, non-ionic, or otherwise pure fluids and/or gases that are compatible with sensor materials including glass, silicon, ceramic, epoxy, RTV, gold, aluminum and nickel.
CONNECTIONS	Male Luer Coupler
PHYSICAL & ENVIRONMENTAL	
DISPLAY	5 Digit, 7-Segment Non-Backlit LCD
CONSTRUCTION	ENCLOSURE ABS Plastic
	OVERLAY Lexan, Back Printed
MEMORY	SETUP EEPROM, All Parameters
	RETENTION 10 Years w/o Power
SIZE	7.69 x 3.97 x 1.82 Inches (195.3 x 100.8 x 46.2 mm)
WEIGHT	≤ 1 Lbs (0.45 kg)
OPERATING RANGE	0 to 50 °C (32 to 122 °F)
STORAGE RANGE	-40 to 60 °C (-40 to 140 °F)
ELECTRICAL & MISC.	
BATTERY	9V Alkaline Battery (ANSI/NEDA 1604A or equivalent)
BATTERY ELIMINATOR	9 VDC, 200 mA
	BC20-21110 BATTERY ELIMINATOR (UNIVERSAL)
POWER CONSUMPTION	ON < 15 mA
	OFF < 40 µA
BATTERY LIFE	CONTINUOUS 80 hours
	OFF 1 year
RS-232 COMMUNICATIONS	BAUD 115200
	DATA BITS 8
	START BITS 1
	STOP BITS 1
	PARITY None
	HANDSHAKING None
	CONNECTIONS 1/8 Stereo Receptacle for use with BC20-21102 RS-232 Cable

## MODEL SUMMARY

BC Model	Description
DPM-2001	Basic Unit
DPM-2001PLUS	Basic Unit + Capture and RS-232
DPM-2100	Basic Unit + Capture, RS-232 and Temp

### Optional Accessories

BC20 - 21110	Battery Eliminator (Universal)
BC20 - 21102	RS-232 Communication Cable
BC20 - 30106	Soft Carrying Case
BC20 - 01005	Universal Adapter Kit



DPM-2001



DPM-2100