

MP4AR Remote Convection Gauge

Range: Atmosphere to 1×10^{-3} Torr

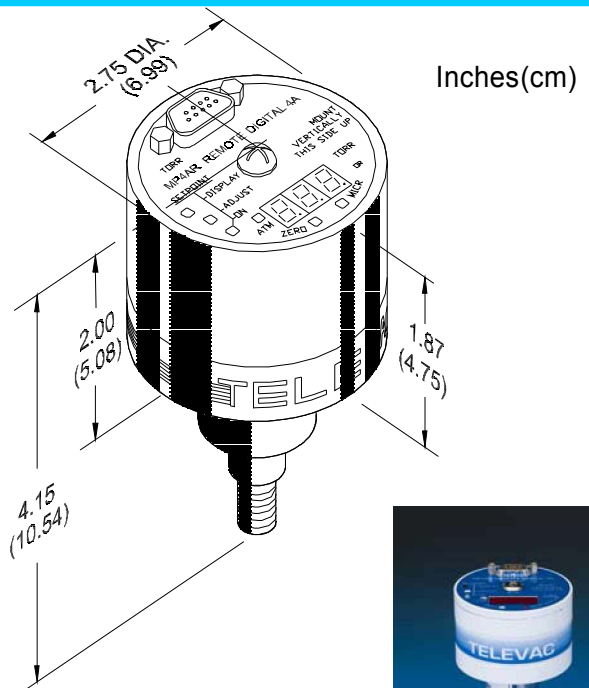
- **PERFORMANCE** - Wide range, fast response and repeatable vacuum measurement system
- **DESIGN** - Simple to read digital display for easy production floor inspection
- **EFFICIENCY** - Quick and easy to replace sensor with zero & atmosphere adjustments
- **ECONOMY** - Stand-alone system eliminates the need for traditional panel-mount instrumentation and cabling



Description

Dimensions

The MP4AR series Convection Remote gauges are compact and easy to use vacuum measurement systems. The patented 4A Convection sensor with fast response time provides actual vacuum readings in milliseconds, much faster than traditional thermocouple type sensors. Wide range vacuum measurement from atmosphere to 1×10^{-3} Torr is an additional feature of this patented convection technology. The compact design of the MP4AR will fit in almost any space area and the self-contained electronics allows you to measure vacuum without using traditional large panel-mount instrumentation systems, clearly a more economical solution. Linear 0-10V output signal can be used for remote displaying and controlling of your vacuum measurement system. The easily adjustable setpoint feature uses a Form C relay contact allowing you to control other functions of your process. The MP4AR is a perfect choice for your OEM vacuum measurement application.



Applications:

Cryogenics	Heat Treatment	Coating Process
Pharmaceutical Products	Electron Beam Welders	
Packaging	Chemical	Pick-up and Conveying

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Ordering Information

MP4AR Analog output with LED Display
 Display range: Atmosphere to 1×10^{-3} Torr
 1 relay contact

Part Number
 2 - 7930 - X YY

X **0 -10 V Output**

1	Log :	$1 \times 10^{+3}$ to 1×10^{-3} Torr 6 Volts = 10^{+3} Torr 0 Volts = 10^{-3} Torr
2	Linear:	1 to 1000 microns 10 Volts = 1000 microns 0.01 Volts = 1 micron

YY **Vacuum Fittings**

10	1/8" NPT Nickel Plate Brass Following are Stainless Steel Connections
01	1/8" NPT
11	1/2" Port Diameter
30	NW16 KF Flange
31	NW25 KF Flange
32	NW40 KF Flange
40	8 VCO male type
41	8 VCO female type
42	8 VCR male type
43	8 VCR female type
44	4 VCR male type
45	4 VCR female type
50	1.33" Conflat Flange
52	2.75" Conflat Flange

Sensor Only Replacements

	Part Number
4A Sensor w/ NW16, Stainless	2-2120-030
4A Sensor w/ NW25, Stainless	2-2120-031
4A Sensor w/ 1/8" NPT, Stainless	2-2120-001

others available upon request, contact factory

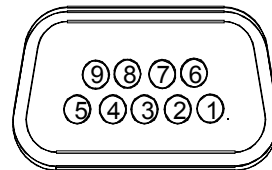
Cables

10 ft. 9 pin to Strip & Tin Leads	2-9852-010
20 ft. 9 pin to Strip & Tin Leads	2-9852-020
35 ft. 9 pin to Strip & Tin Leads	2-9852-035
50 ft. 9 pin to Strip & Tin Leads	2-9852-050

Specifications

Range	Atmosphere to 1×10^{-3} Torr	
Accuracy	+/- 1 micron	0-10 microns
	+/- 10% of reading	10 microns to 10 Torr
	+/- 20% of reading	10 to 100 Torr
	+/- 10% of reading	100 to 1000 Torr
Mounting Orientation	Must be mounted vertically	
Input Voltage/Power	Required 24V DC @ 100 mA	
Setpoint Relay	Form C Contact 24V .5 A rating	
Operating Temperature	+ 15 to +50 C	
Calibration Medium	Dry Air or Nitrogen	
Sensor Material	Stainless Steel or Nickel Plated Brass	
Overpressure Tolerance	150 PSI	

Electrical Connections



1. Relay normally open
2. Relay normally closed
3. +24 Volt power
4. Power common
5. Lin/Log signal output
6. Relay common
7. Non-linear signal output
8. Signal return
9. Set point output

Output Graph

Logarithmic output for 4A

