

CRYSTAL

ACCURACY

0 to 20% of range: $\pm(0.04\%$ of Full Scale)

20% to 100% of range: $\pm(0.2\%$ of Reading)

Vacuum: $\pm(0.25\%$ of Full Scale*)

* Full Scale = -99.9 kPa

Includes all effects of linearity, hysteresis, repeatability, temperature, and stability for two years.

All models indicate vacuum, but vacuum specification applies to 200 kPa, 1 MPa, and 2 MPa models only.

Not recommended for continuous use at high vacuum. Refer to XP2i-DP data sheet for gauges that are intended for continuous high vacuum use.

OPERATING TEMPERATURE

Temperature range: -10°C to 50°C (14°F to 122°F)

Non-condensing. No change in accuracy over operating temperature range. Gauge must be zeroed to achieve rated specification.

DISPLAY

Screen: **5 digits, 16.8 mm (0.66") high**

Display rate: **4 readings/second**

LCD readable in sunlight with bright backlight.

POWER

2 x AA: **900 hours, typical**

Extended battery life: **1 reading/15 seconds: 3,000 hours**

1 reading/30 seconds: 6,000 hours

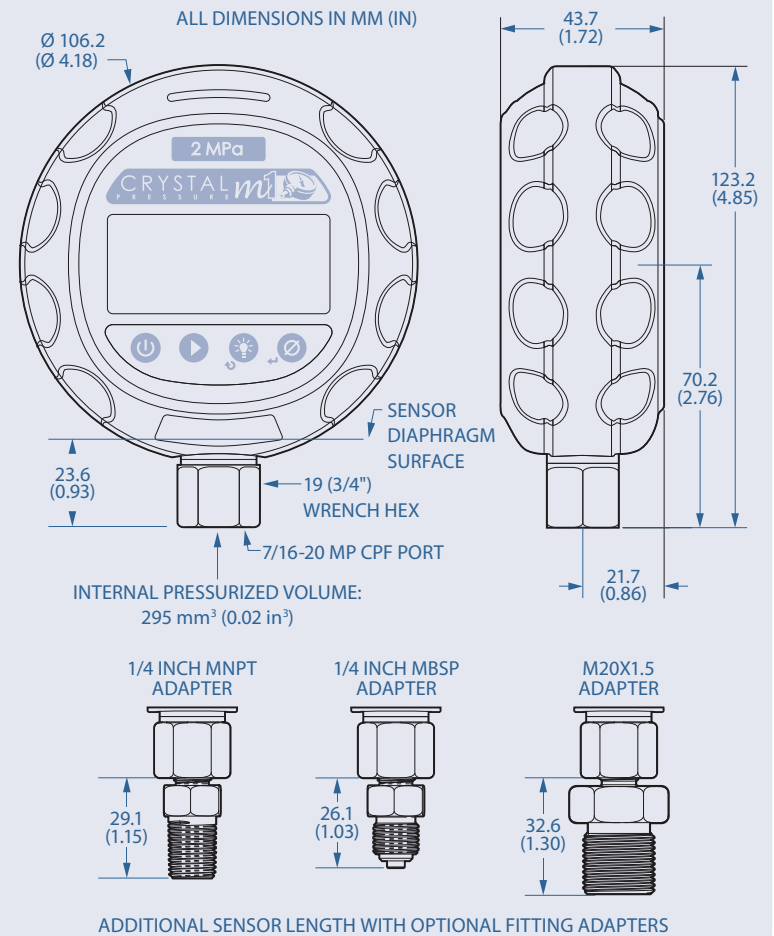
1 reading/60 seconds: 10,000 hours

1 reading/5 minutes: 25,000 hours

1 reading/10 minutes: 30,000 hours

Uses 2 alkaline AA (LR6) batteries. Use of backlight reduces operating time. Extended battery life is keypad selectable. Do not overtighten rear cover when replacing batteries.

m1 Pressure Gauge MPa



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ENCLOSURE

Weight: **331 g (11.7 oz)**

Rating: **IP65**

Housing: **Polyester/Polycarbonate Blend**

Keypad and labels: **UV Resistant Polyester**

Weight includes batteries and protective boot.

Water resistant housing incorporating o-ring seals [IEC 60529].

LCD protected from impact damage by polycarbonate lens under polyester window.

Skydrol® compatible.

SENSOR

Wetted materials: (WRENCH TIGHT) **316 stainless steel**

(FINGER TIGHT) **316 stainless steel
and Viton® (internal o-ring)**

Diaphragm seal fluid: **Dow Corning® 200**

Connection: **Bottom, 7/16"-20 UNF 2B female CPF**

All welded, with a permanently filled diaphragm seal.

Metal to metal cone seal; O-ring can be removed if necessary.

*Interchangeable (wrench tight) with HIP** and Autoclave Engineers* medium pressure (1/4") series fittings and adapters.*

1/4" male NPT adapter included unless BSP is specified.

Can be cleaned and certified for oxygen service.

STORAGE TEMPERATURE

Temperature range: **-40°C to 75°C (-40°F to 167°F)**

Batteries should be removed if stored for more than one month.

SPECIAL FEATURES

Averaging: **Smooths unsteady readings (2 to 20 samples)**

Vertical bar graph: **Percent pressure indication for quick reference**

Capture: **Minimum (LO) and Maximum (HI)**

CERTIFICATIONS



m1 complies with the Electromagnetic Compatibility and Pressure Equipment Directives. Refer to the EC Declaration of Conformity for specific details.



m1 is approved for use as a portable test instrument for Marine use and complies with Det Norsjke Veritas' Rules for Classification of Ships, High Speed & Light Craft, and Offshore Standards.

RANGE & RESOLUTION TABLE

P/N	Range	Over-Pressure	Display Resolution									
			PSI	kPa	MPa	bar	mbar	kg/cm ²	inch H ₂ O	inch Hg	mm H ₂ O	mm Hg
200KPA	200	3.0 x	0.001	0.01		0.0001	0.1	0.0001	0.1	0.01	1	0.1
1MPA	1	2.0 x	0.01	0.1	0.0001	0.001	1	0.001	0.1	0.01		1
2MPA	2	2.0 x	0.01	0.1	0.0001	0.001	1	0.001		0.1		1
10MPA	10	2.0 x	0.1	1	0.001	0.01		0.01		0.1		
20MPA	20	1.5 x	0.1	1	0.001	0.01		0.01		1		
70MPA	70	1.5 x	1		0.01	0.1		0.1		1		

ORDERING INFORMATION

Model	P/N	Adapter: Type	Oxygen Service?
m1			

Standard: NPT: (omit) No: (omit)

Options: G 1/4 B: -BSP Yes: -O

M20x1.5: -M20

SAMPLE PART NUMBERS

M1-2MPA 2 MPa standard gauge, with a 1/4" NPT pressure fitting
 M1-10MPA-BSP-0 10 MPa gauge, with a 1/4" BSP pressure fitting and Oxygen Service options

ACCESSORIES



Protective Boot P/N 3436 (included)

Protect your m1 from harsh environments with our form fitting chemical resistant thermoplastic boot (Skydrol fluid compatible).

COMPLIMENTARY PRODUCTS

Crystal Engineering offers a wide range of products that work with the m1:

- [Fittings that connect without tools, safely and without leaks](#)
- [Lightweight, super flexible high pressure hoses](#)
- [Fitting kits and adapters](#)
- [Pneumatic hand pumps](#)
- [Hydraulic hand pumps](#)
- [Portable pressure comparators](#)

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