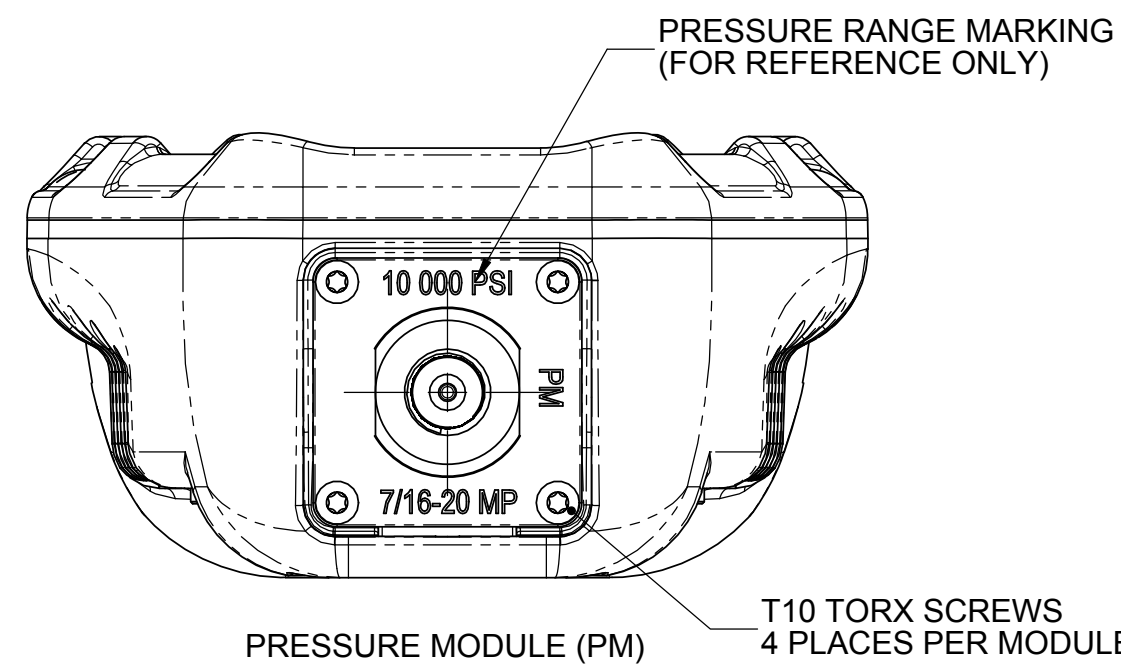
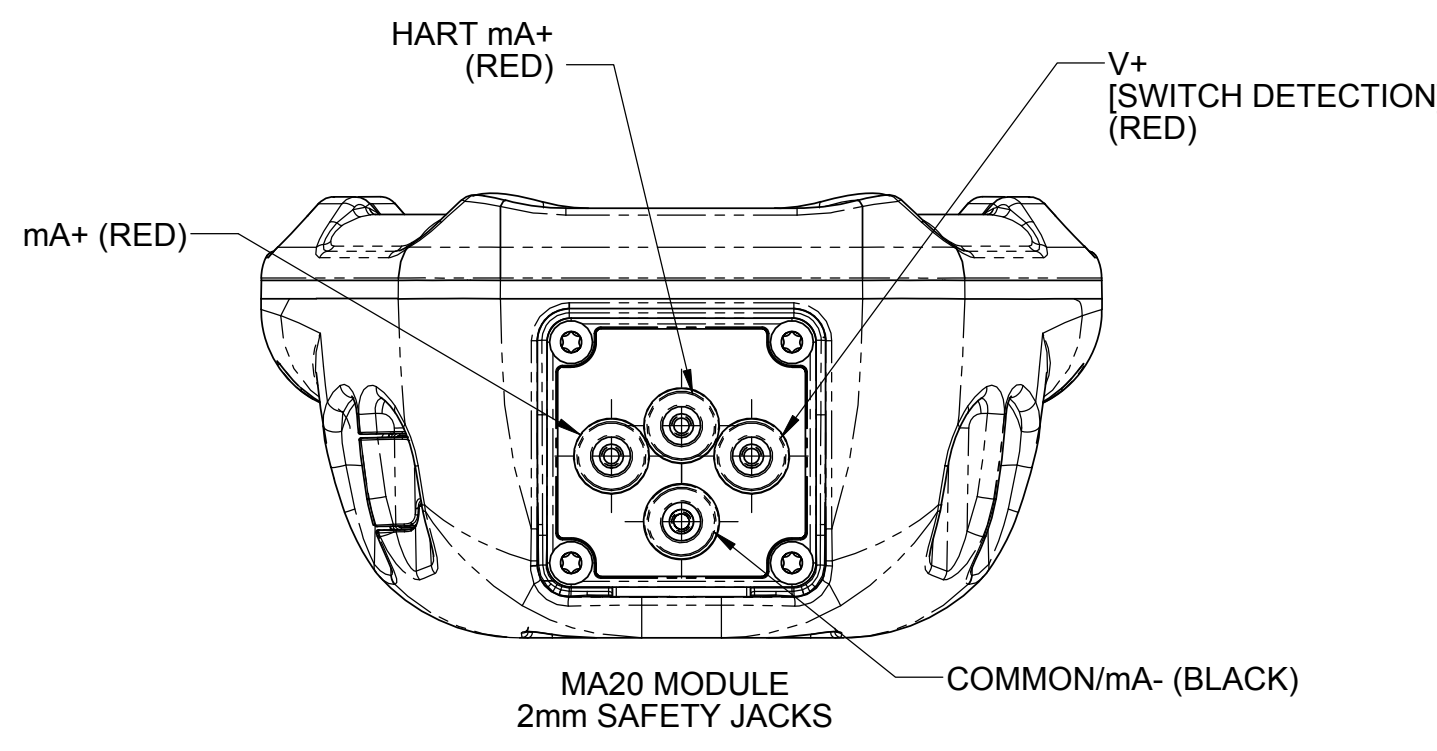
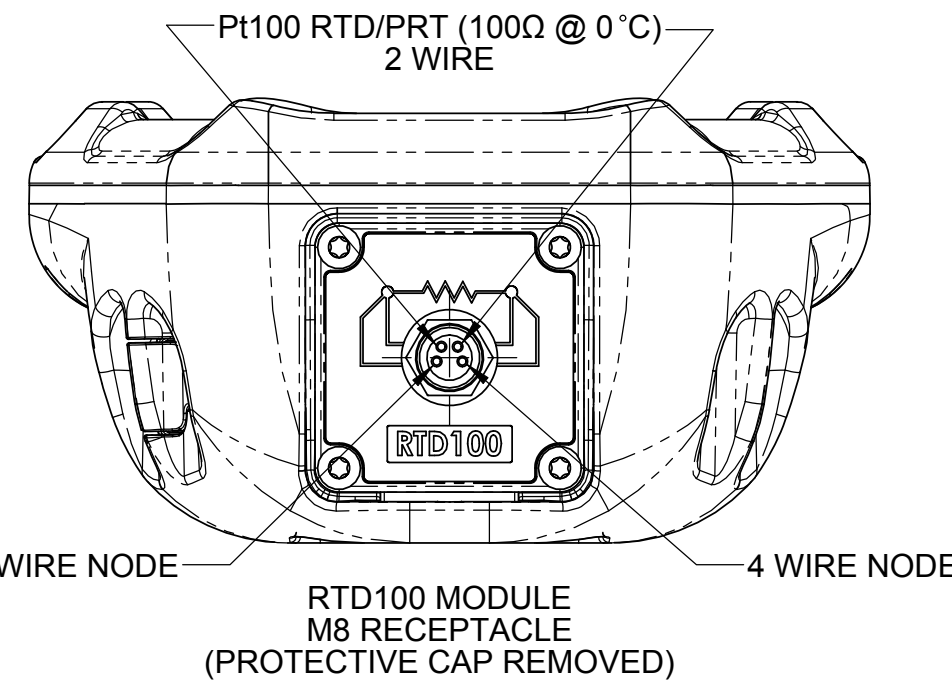


REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/19/2009	ON FILE



CRYSTAL CPF SYSTEM:
MEDIUM PRESSURE FEMALE (MPF)
(1/4" MEDIUM PRESSURE TUBE SYSTEM
WITH 7/16"-20 INTERNAL THREADS)



SPECIFICATIONS

CHASSIS: ENCLOSURE: POLYESTER/POLYCARBONATE BLEND, POLYESTER LABELS, AND COATED KEYS OVER MEMBRANE SWITCH PANEL. PROPRIETARY POLYPROPYLENE BLEND PROTECTIVE BOOT.

ENCLOSURE RATING: DESIGNED TO MEET NEMA 4/IP67

WEIGHT: 1.5 LBS [680g] FOR TYPICAL CONFIGURATION (ONE PM, RTD100 MODULE, 4AA BATTERY MODULE AND PROTECTIVE BOOT)

OPERATING AND COMPENSATED TEMPERATURE RANGE: -20°C TO +50°C (4°F TO 122°F).

STORAGE TEMPERATURE RANGE: -40°C TO +75°C (-40°F TO 167°F).

CERTIFICATIONS: [RATINGS SUBJECT TO BATTERY TYPE USED - SEE POWER MODULE SPECIFICATIONS]
ATEX: II 1G Ex ia IIB T4 Ga
IECEX SCHEME: II 1G Ex ia IIB T4 Ga

PRESSURE MODULE (PM): **PRESSURE RANGE:** SEE PRESSURES AND RESOLUTIONS CHART

PRESSURE ACCURACY: 30 - 100% OF FULL SCALE ±(0.025% OF READING), ±(0.05% OF READING), OR ±(0.1% OF READING)
0 - 30% OF FULL SCALE ±(0.0075% OF READING), ±(0.015% OF READING), OR ±(0.03% OF FULL SCALE)

PRESSURE CONNECTION: CRYSTAL CPF SYSTEM: MEDIUM PRESSURE FEMALE (MPF) (1/4" MEDIUM PRESSURE TUBE SYSTEM WITH 7/16"-20 INTERNAL THREADS)

PRESSURE PORT MEDIA COMPATABILITY: LIQUID AND GASES COMPATIBLE WITH 316L SS SENSOR.

RTD100 MODULE: **RANGE:** 0-400 OHMS
RESOLUTION: 0.01 Ω
ACCURACY: ± (0.015% OF READING + 0.02Ω)

MA20 MODULE: **mA (CURRENT):**
RANGE: 3-25 mA
RESOLUTION: 0.001mA
ACCURACY: ±(0.015% OF READING + 0.002mA)
DIRECT IMPEDANCE: 15Ω
HART RESISTANCE: ≤ 265Ω

VOLTAGE:
RANGE: 0-30VDC
RESOLUTION: 0.001VDC
ACCURACY: ±(0.015% OF READING + 0.002VDC)
INPUT RESISTANCE: ≥ 1MΩ

SWITCH DETECTION:
STATE: OPEN AND CLOSED DETECTION

POWER MODULE: **4AA:** FOUR AA (1.5V) ALKALINE BATTERIES. REFER TO APPROVED BATTERY TABLE. USE OF ANY OTHER BATTERY VOIDS INTRINSIC SAFETY RATINGS

APPROVED BATTERY TABLE		
APPROVED BATTERY	Ta=	MARKING
RAYOVAC MAXPLUS 815	-20°C TO +50°C	Ex ia IIB T4 Ga
DURACELL MN1500	-20°C TO +45°C	
ENERGIZER E91, EN91	-20°C TO +50°C	Ex ia IIB T3 Ga
DURACELL MN1500		

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

	PRESSURES AND RESOLUTIONS														
	AVAILABLE PRESSURE MODULES					AVAILABLE UNITS AND DISPLAYED RESOLUTION									
	PSI	bar	kPa	MPa	kg/cm2	PSI	kg/cm2	in Hg	in H2O	mmHg	mmH2O	kPa	bar	mbar	Mpa
0.025% OF RDG	30					0.001	0.0001	0.001	0.01	0.01	1	0.01	0.0001	0.1	
		3				0.001	0.0001	0.001	0.01	0.01	1	0.01	0.0001	0.1	
			300									0.01	0.0001	0.1	
				3		0.001	0.0001	0.001	0.01	0.01	1	0.01	0.0001	0.1	0.00001
		10				0.001	0.0001	0.01	0.1	0.1	1	0.01	0.0001	0.1	0.00001
				1		0.001	0.0001	0.01	0.1	0.1	1	0.01	0.0001	0.1	0.00001
0.05% OF RDG				10		0.001	0.0001	0.01	0.1	0.1	1	0.01	0.0001	0.1	0.00001
	300					0.01	0.001	0.01	0.1	0.1	1	0.01	0.001	1	0.0001
		30				0.01	0.001	0.01	0.1	0.1	1	0.01	0.001	1	0.0001
				3								0.1	0.001	1	0.0001
					30	0.01	0.001	0.01	0.1	0.1		0.1	0.001	1	0.0001
		1000				0.1	0.001	0.1				0.1	0.001		0.0001
0.1% OF RDG		100				0.1	0.001	0.1				0.1	0.001		0.0001
				10								0.1	0.001		0.0001
					100	0.1	0.001	0.1				0.1	0.001		0.0001
	3000					0.1	0.01	0.1				1	0.01		0.001
		300				0.1	0.01	0.1				1	0.01		0.001
				30								1	0.01		0.001
0.1% OF RDG				300		0.1	0.01	0.1				1	0.01		0.001
	10000					1	0.01					1	0.01		0.001
		700				1	0.01					1	0.01		0.001
			70								1	0.01		0.001	
				700		1	0.01					1	0.01		0.001

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
.XXX ± .005
.XXXX ± .001

CRYSTAL (805) 595-5477
engineering corporation www.crystalengineering.net

VISION, PRESSURE RECORDER

APPROVALS	DATE
DRAWN M.J.Cain	8/19/09
CHECKED D.Porter	8/19/09
MFG. ENGR. T.Leger	8/19/09
Q.A. D.Porter	8/19/09

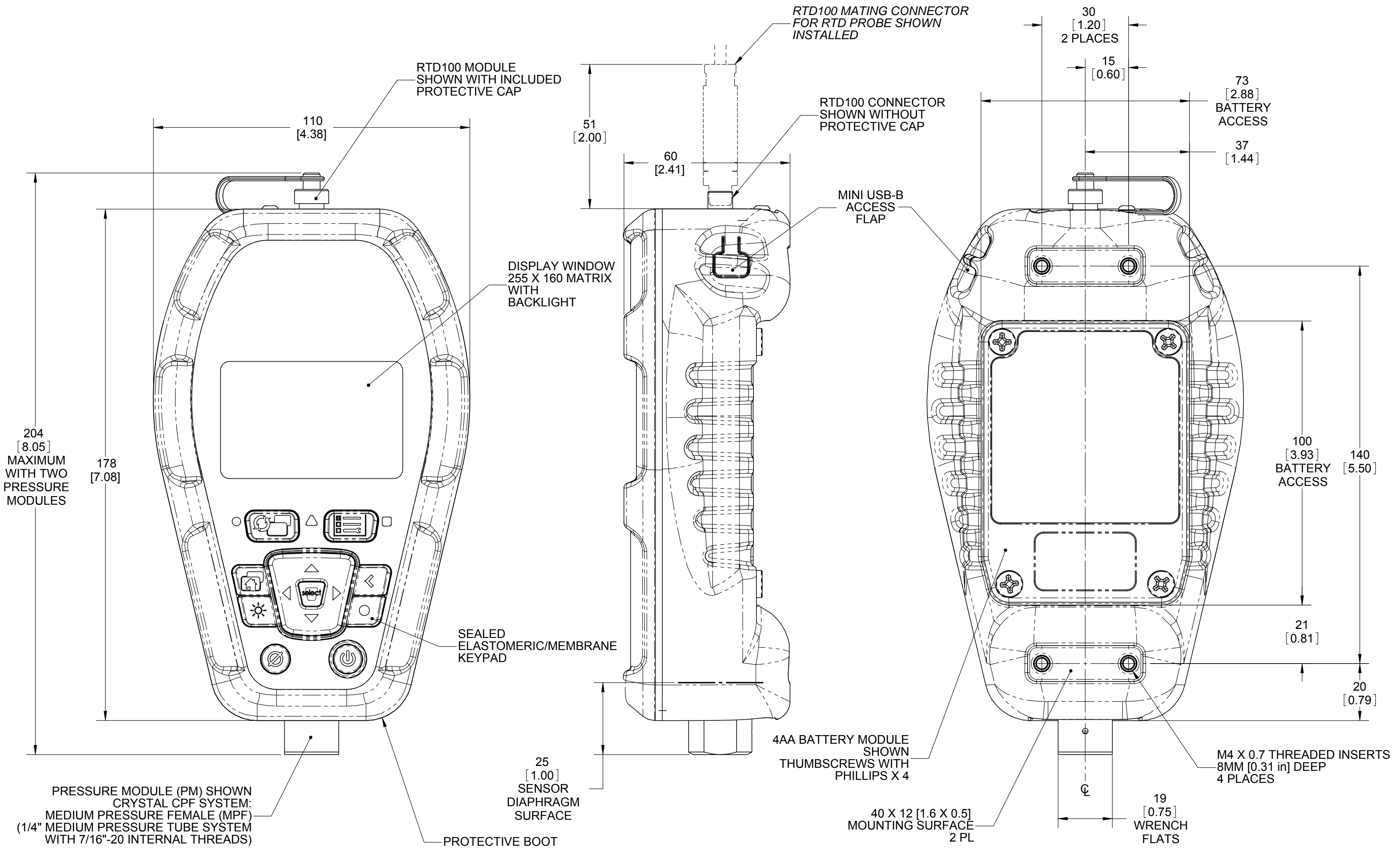
SCALE: 1:2

SIZE **C** DRAWING NO. **4121** REV **A**

DO NOT SCALE DRAWING SHEET 1 OF 2

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
-	See Sheet 1	-	-



ALL DIMENSIONS ARE IN MILLIMETERS [INCHES]
REFER TO SHEET 1 FOR SPECIFICATIONS

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XXX ± .005
.XXXX ± .001

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