

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
0	INITIAL	12/9/05	ON FILE
A	REVISED FORMAT	1/17/08	ON FILE

SPECIFICATIONS

PRESSURE RANGE: SEE PRESSURES AND RESOLUTIONS CHART

PRESSURE ACCURACY: ± (0.05% OF READING + FLOOR TERM*)
 * FLOOR TERM = + 0.005% of FS or +1 LEAST SIGNIFICANT DIGIT (LSD) FOR RANGES WITH LIMITED RESOLUTIONS:

RANGE	LSD FLOOR TERM
16 PSI	0.001 PSI
1500 PSI	0.1 PSI
1 BAR	0.0001 bar
100 BAR	0.01 bar
100 KPA	0.01 kPa
10000 KPA	1 kPa

VACUUM ACCURACY: ±(0.25% OF READING + VACUUM FLOOR TERM*) (ONLY APPLIES TO 300 PSI AND BELOW GAUGES):

RANGE	VACUUM FLOOR TERM
16 PSI, 36 PSI	0.004 PSI
300 PSI	0.01 PSI
1 BAR, 2 BAR	0.0003 bar
20 BAR	0.001 bar
100 KPA, 200 KPA	0.03 kPa
2000 KPA	0.1 kPa

CURRENT LOOP RANGE: 0 - 55mA

CURRENT LOOP ACCURACY: ±(0.025% OF READING + 0.001mA)

POWER: SINGLE 9 VOLT; EVERYREADY P/N 216 CARBON-ZINC OR DURACELL P/N 1604, ALKALINE-MANGANESE BATTERY. USE OF ANY OTHER BATTERY VOIDS INTRINSIC SAFETY RATINGS

PRESSURE CONNECTIONS: 1/8"-27 FEMALE NPT

ELECTRICAL INTERFACES:
 4mm DIAMETER SHIELDED BANANA JACKS, 0.75" SPACING, CURRENT LOOP
 PCMCIA STYLE PROPRIETARY CONNECTOR, RS232

ENCLOSURE: ALUMINUM, POLYCARBONATE BATTERY CASE

COLOR: BLACK

WEIGHT: 12.1 oz (342 g), UP TO 600 PSI; 14.1 oz (401 g), 1500 PSI AND UP

PRESSURE PORT MEDIA COMPATABILITY: LIQUID AND GASES COMPATIBLE WITH PTFE PENETRATED, ANODIZED ALUMINUM SENSOR MANIFOLD; 316 SSTL SENSOR.

PRESSURE PORT VOLUMETRIC DATA:
 LP DISTANCE TO DIAPHRAGM (-A- TO -B-): 0.88"
 LP VOLUME: 0.13 CUBIC INCHES
 HP DISTANCE TO DIAPHRAGM (-A- TO -B-): 0.70"
 HP VOLUME: 0.06 CUBIC INCHES

OPERATING AND COMPENSATED TEMPERATURE RANGE: 0°C TO +50°C (32°F TO 122°F).

STORAGE TEMPERATURE RANGE: -20°C TO +70°C (-4°F TO 158°F).

CERTIFICATIONS:
 INTRINSICALLY SAFE: CENELEC - EEx ia IIC, T4
 CSA - Class I, Groups A, B, C, D, Temperature Code T4

DIMENSIONS ARE IN INCHES [MILLIMETERS]

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

PRESSURES AND RESOLUTIONS

		AVAILABLE PRESSURES				AVAILABLE UNITS AND DISPLAY RESOLUTIONS											
		PSI	Bar	kPa	ALLOWED OVERPRESSURE	PSI	kg/cm2	"Hg	"H2O	mmHg	cmH2O	mmH2O	kPa	Mpa	mBar	Bar	
PRESSURE PORT	LP	16 36	1 2	100 200	6X 3X	0.001* 0.001	0.0001 0.0001	0.001 0.001	0.01 0.01	0.01 0.01		1 1	0.01* 0.01		0.1* 0.1		
	HP	300 600 1500 3000	20 40 100 200	2000 4000 10000 20000	6X 3X 4X 2X	0.01 0.01 0.1* 0.1	0.001 0.001 0.01 0.01	0.01 0.01 0.1 0.1	0.1 0.1 1 1		1		0.1 0.1 1 0.001	0.0001 0.001 0.001		0.001 0.001 0.01* 0.01	

VACUUM AND RESOLUTIONS

APPLICABLE PRESSURES			AVAILABLE UNITS AND DISPLAY RESOLUTIONS									
PSI	Bar	kPa	PSI	kg/cm2	"Hg	"H2O	mmHg	cmH2O	mmH2O	kPa	mBar	Bar
16	1	100	0.001	0.0001	0.001	0.01	0.01		1	0.01	0.1	
36	2	200	0.001	0.0001	0.001	0.01	0.01		1	0.01	0.1	
300	20	2000	0.01*	0.001	0.01	0.1	0.1	1		0.1*		0.001*

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

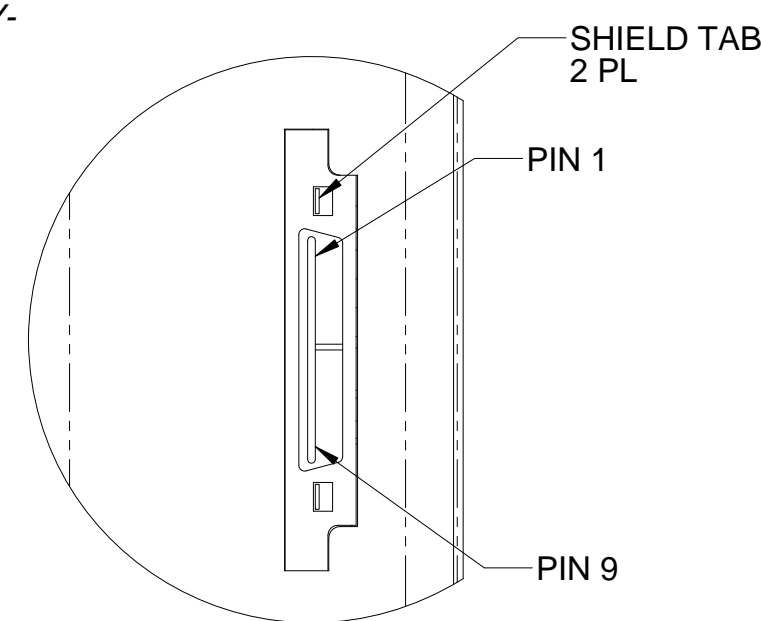
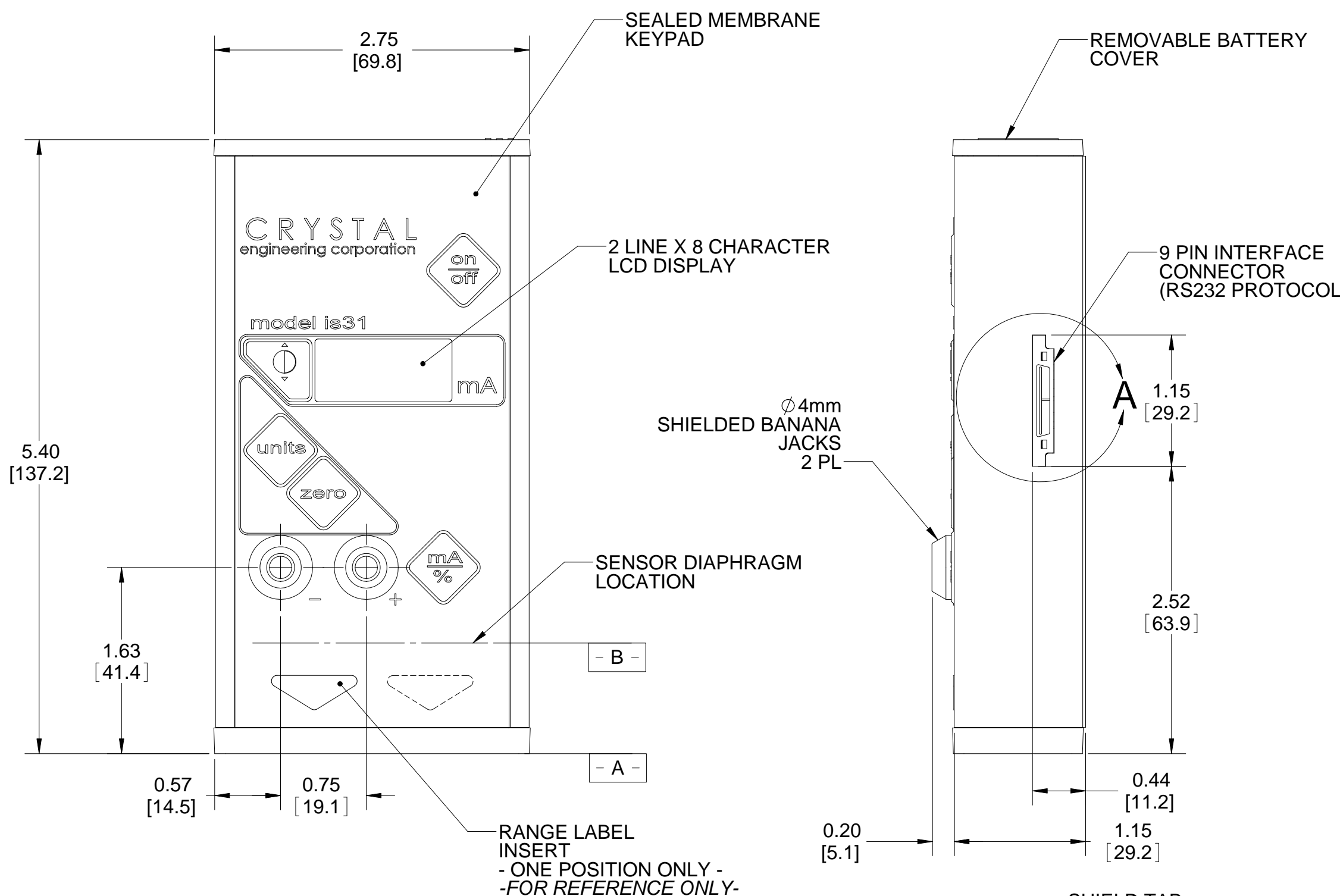
CRYSTAL (805) 595-5477
 engineering corporation www.crystalengineering.net

IS31 SERIES CALIBRATOR

APPROVALS	DATE
DRAWN M.J.Cain	11/28/05
CHECKED D.Porter	12/9/05
MFG. ENGR. M.J.Cain	12/9/05
Q.A. M.Merrill	12/9/05

SCALE: 1:1	SIZE	DRAWING NO.	REV
	C	3403	A

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CONNECTOR PINOUT

PIN	FUNCTION
1	NC
2	TX
3	RX
4	DTR
5	COM
6	NC
7	RTS
8	NC
9	NC

NOTE: ONLY ONE PORT EXISTS FOR THIS PRODUCT. PORT LOCATION IS DEPENDANT ON PRESSURE RANGE. - SEE PRESSURES AND RESOLUTION CHART FOR AVAILABLE PORT CONFIGURATIONS -

