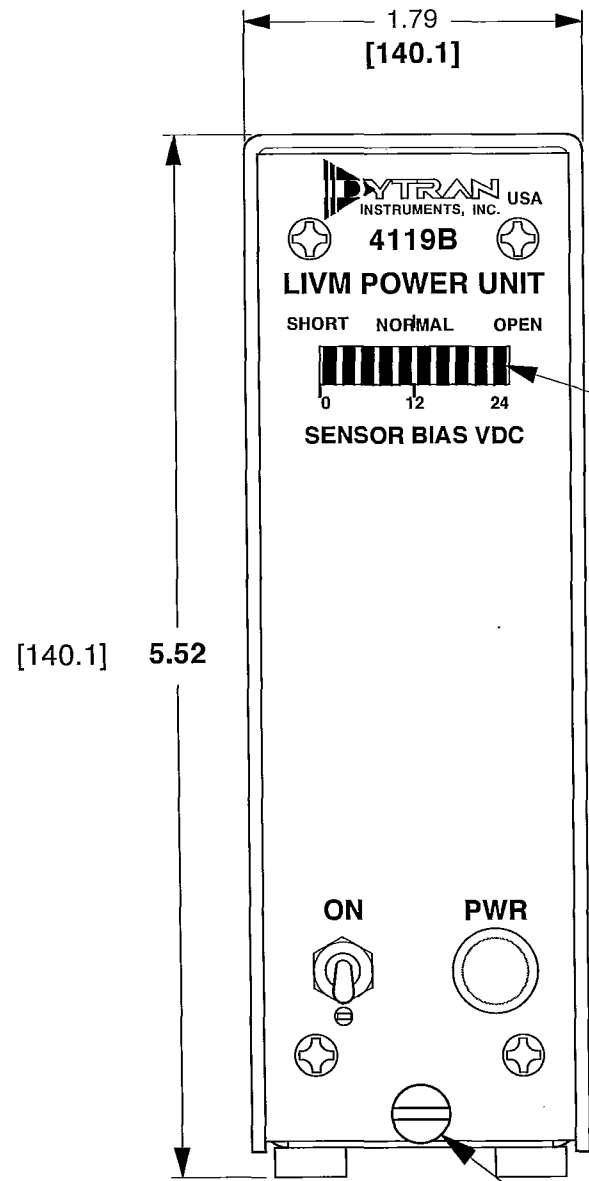


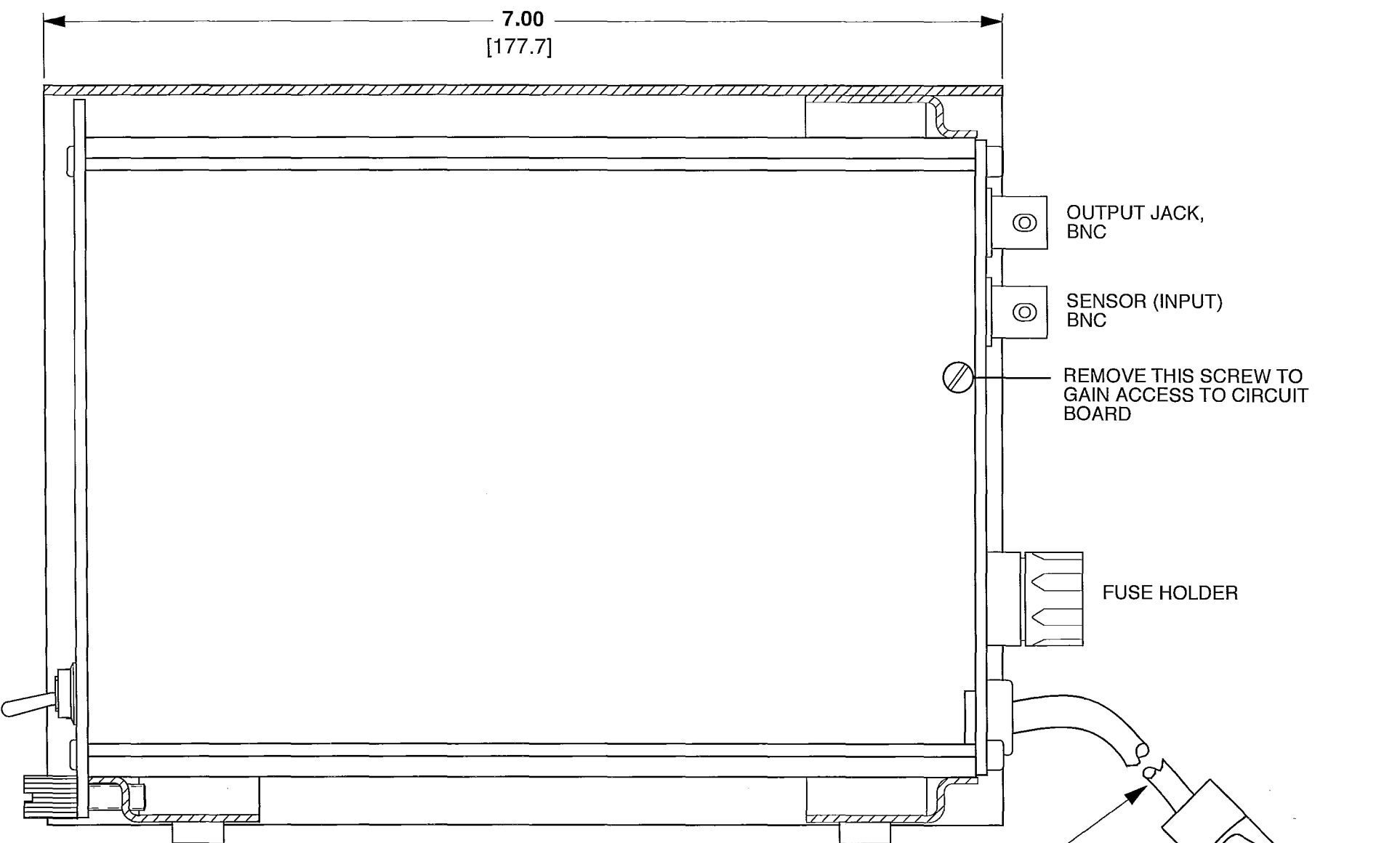
REV	ECN	DESCRIPTION	BY/DATE	CHK	APP
A	10288	UPDATED VIEW OF CONNECTOR	RLA 8/20/13	EM	RT



4119B POWER UNIT

10-SEGMENT LED ARRAY
DC VOLTMETER
MONITORS SENSOR
BIAS VOLTAGE

REMOVE THIS SCREW
TO REMOVE UNIT FROM
OUTER CASE



THIS VIEW IS WITH OUTER
CASE SECTIONED

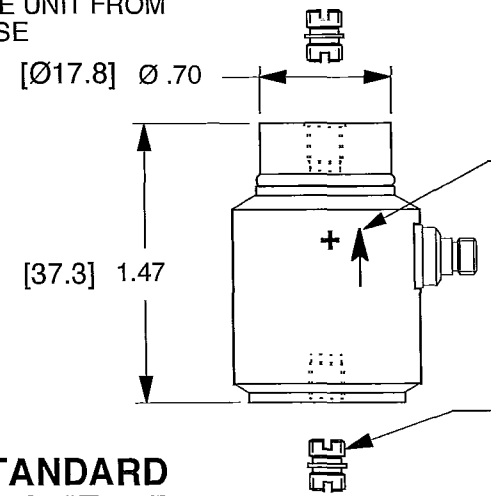
OUTPUT JACK,
BNC

SENSOR (INPUT)
BNC

REMOVE THIS SCREW TO
GAIN ACCESS TO CIRCUIT
BOARD

FUSE HOLDER

LINE CORD, 6 FT.



SENSE AND DIRECTION OF
ACCELERATION FOR POSITIVE GOING
OUTPUT VOLTAGE

MODEL 6200 10-32
MOUNTING STUD, 2
PROVIDED

**3123A STANDARD
ACCELEROMETER**

UNLESS OTHERWISE SPECIFIED, ALL
DIMENSIONS ARE IN INCHES. METRIC
CONVERSIONS [mm] ARE SHOWN IN
BRACKETS.

DYTRAN INSTRUMENTS, INC.		MASTER ONLY IF IN RED		CHATSWORTH, CA.	
SCALE	NO SCALE	REV	DATE	ECN	
DATE	8/10/05	PART NO.	MODEL 3123AK		
DRAWN	N.C.	CHECKED	R.A.	MAT'L	
APPROVED	N.C.	8/10/05	NEXT ASSEMBLY	USED ON	
TITLE				DWG NO.	
OUTLINE/INSTALLATION DRAWING, SYSTEM MODEL 3123AK				127-3123AK	
				SHEET 1 OF 1	

Model Number 3123AK	PERFORMANCE SPECIFICATION	DOC NO PS3123AK
IEPE ACCELEROMETER BACK-TO-BACK CALIBRATION SYSTEM		REV A, EGN 14353, 07/19/18



• SYSTEM FOR BACK-TO-BACK CALIBRATION
• EXCELLENT LINEARITY

PHYSICAL (SENSOR)

Weight, Max (Accelerometer)
Connector
Mounting Provision Top and Bottom Tapped Holes
Material (Non-magnetic) Housing and Connector
Element Style

ENGLISH		SI	
3.5	oz	100	grams
10-32 Coaxial		10-32 Coaxial	
10-32		10-32	
300 Series Stainless Steel Planar Shear		300 Series Stainless Steel Planar Shear	

PHYSICAL SPECIFICATIONS (AMPLIFIER/POWER UNIT)

Weight, Max (Amplifier / Power Unit)
Sensor/Output Connector
Power cord, STD
Size (H x W x D) [6]
Temperature Range

32	oz	900	grams
BNC/BNC Coaxial		BNC/BNC Coaxial	
6FT 3-Wire w/ Chassis GND		6FT 3-Wire w/ Chassis GND	
5.5 x 1.6 x 8.0	inches	140 x 41 x 203	mm
0 to +120	°F	-18 to 48	°C

SYSTEM SPECIFICATIONS

System Sensitivity, ± 5% @ 100 Hz [4]
Frequency Response, ±2% [4]
Linearity
Range F.S. for 5V Out
Operating Force Range [5]
Equivalent Electrical Noise, (Broadband)
Output Impedance
Input Voltage, Power Unit/Sensor
Filter, Low Pass, Active
Sensor Supply Current/Voltage, STD

100	mV/G	100	mV/G
10 to 5,000	Hz	10 to 5,000	Hz
±1	% F.S.	±1	% F.S.
±50	G	±491	m/s ²
±10	Force-lb	±44.5	N
0.003	Grms	0.03	m/s ² rms
2	Ohms	2	Ohms
115 / 2.4	Vac / VA	115 / 2.4	Vac / VA
12	dB/octave	12	dB/octave
2 / +20	mA / VDC	2 / +20	mA / VDC

ACCELEROMETER MODEL 3123A SPECIFICATIONS

Sensitivity, ±5% [1]
Discharge Time Constant
Coefficient of Thermal Sensitivity
Range F.S
Frequency Response, ±2%
Resonant Frequency
Equivalent Electrical Noise Floor, Max
Transverse Sensitivity, Max
Strain Sensitivity @ 250µe
Output Impedance (Sensor)

100	mV/g	10.20	mV/m/s ²
0.5 to 1.5	Sec	0.5 to 1.5	Sec
0.03	% / °F	0.05	% / °C
50	g	491	m/s ²
10 to 5000	Hz	10 to 5000	Hz
>40	kHz	>40	kHz
0.003	Grms	0.03	m/s ² rms
3	%	3	%
0.002	g/µe	0.02	m/s ² /µe
<100	Ohms	<100	Ohms

ENVIRONMENTAL (SENSOR)

Shock Max
Vibration Max
Temperature Range
Seal

3000	G pk	29430	m/s ²
1000	G	9810	m/s ²
-60 to +200	°F	-51 to +93	°C
Epoxy		Epoxy	

ELECTRICAL (SENSOR)

Supply Current Range [3]
Compliance Voltage Range
Bias Voltage

2 to 20	mA	2 to 20	mA
+ 18 to +20	VDC	+ 18 to +20	VDC
7.5 to 9.5	VDC	7.5 to 9.5	VDC

This family also includes:

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)

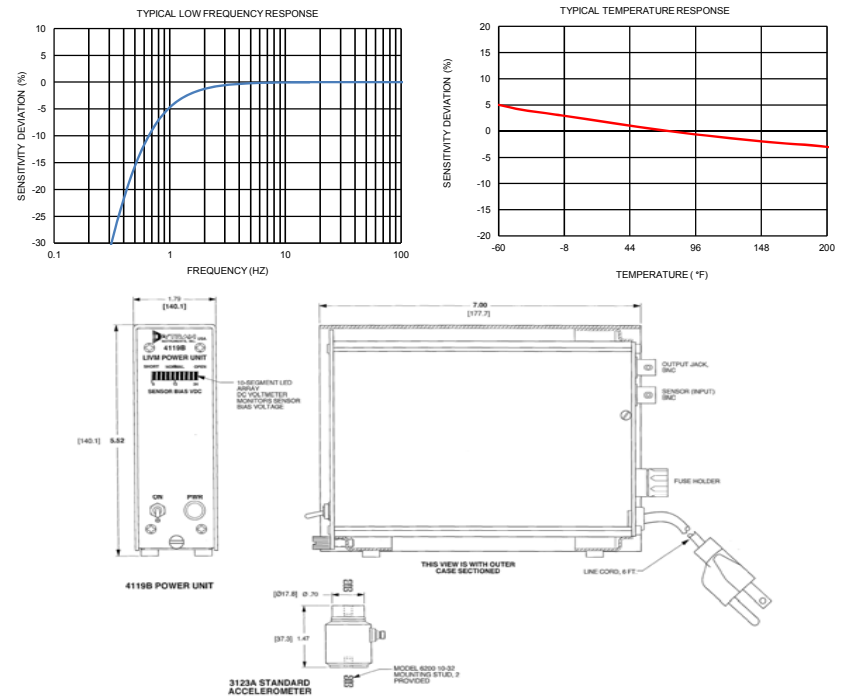
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6200 Mounting Studs, qty 2
- 3) Model 6201 Mounting Stud, qty 1
- 4) Model 6213 Adhesive Mounting Base, qty 1

Notes:

- [1] Measured at 100 Hz, 1 Grms per ISA RP 37.2
- [2] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [4] System calibrated at factory with **NIST** traceable transfer standard accelerometer weighing 19 grams. NIST traceability number supplied with each system calibration.
- [5] Force pound range = product of weight of test accelerometer x G level.
- [6] Mounts in available Model 4200 19-inch wide equipment rack. Up to 10 units fit in one rack.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3123AK for more information.

