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**LTFB-160** TRUE MECHANICAL FORCE

TRUE MECHANICAL FORCE BALANCE ACCELEROMETER

## Made for structural monitoring and seismology.

LTFB-160 high performance true is a mechanical force balance accelerometer which was conceived specifically for structural monitoring and seismology. Thanks to the high dynamic range the LTFB-160 provides excellent data both where the seismic noise is extremely low (as in environmental noise) and in the presence of strong motion events. Our standard true force balance accelerometer comes with a frequency range from 0 to 80Hz, this range is tuned expressly for structural and seismic analysis where the higher frequencies are of no practical interest. Structures' natural frequencies are typically in the order of a few Hertz. Lunitek provides custom bandwidth extension up to 200Hz for scientists and engineers who are interested in evaluating motions at higher frequency. LTFB-160 is available in four ranges:  $\pm 0.5g, \pm 1g, \pm 2g, \pm 4g.$ 

HIGH DYNAMIC RANGE UP TO 160dB

FREQUENCY RANGE DC ÷ 80Hz (200HZ OPT)

FULL SCALE RANGES AVAILABLE  $\pm 0.5G$ ,  $\pm 1G$ ,  $\pm 2G$ ,  $\pm 4G$ 

HIGH ACCURACY

**(EV FEATURES** 

LOW SELF-NOISE

GOOD THERMAL STABILITY

POWER SUPPLY FROM 5V UP TO 40V

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Seismology Structural monitoring	
TYPOLOGY Biaxial or Monoaxial	

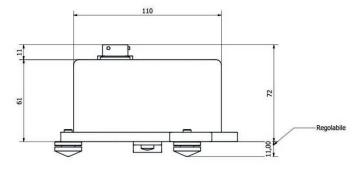
**APPLICATIONS** 

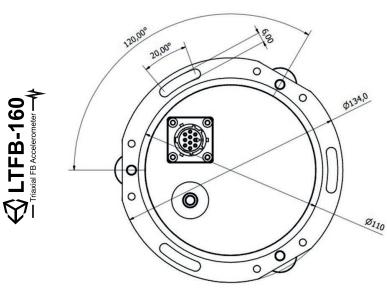
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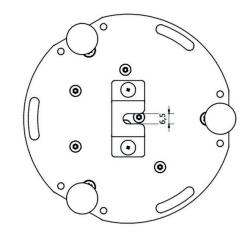
FEEDBACK Force balance	
FULL-SCALE RANGE ±4g, ±2g, ±1g, ±0.5g,	-
BANDWIDTH DC to 80 Hz -3 dB point (200Hz extension available)	NCE _
DYNAMIC RANGE (Integrated RMS) 160 dB @ 1 Hz over 1 Hz bandwidth 150 dB, 3 to 30 Hz	PERFORMAN
OFFSET < 1mg	— <b>E</b>
NON-LINEARITY < ± 0.1 % FS	_
SCALE FACTOR TEMPERATURE COEFFICIENT 0.01% / deg C Max	
<b>CONNECTOR</b> 62GB-12E12-10SN, 10-pin	 
ACCELERATION OUTPUT 40 Vpp differential	- Ĕ
OUTPUT IMPEDANCE 2 x 50 Ω	_ 2

POWER SUPPLY 5 to 40 V DC isolated input   POWER CONSUMPTION 1.5 W typical quiescent   PROTECTION Reverse-voltage, overvoltage and surge protected   ISOLATION Supply power is isolated from signal ground   GROUNDING Predrilled hole for M4 x 5 grounding lug screw	- Power Supply -
STORAGE TEMPERATURE RANGE -20 ÷ +80 °C HUMIDITY 0 to 100% OPERATING TEMPERATURE RANGE - 40 ÷ +80°C WEATHER RESISTANCE Rated to IP67, IP68 opt	OP. CONDITIONS
HOUSING Aluminum, anodized hard coating LEVELING Integrated bubble level Adjustable locking leveling screws OD 134mm HEIGHT 72 mm WEIGHT 960 g	

Connector ozab izeiz ioon, io pii
ACCELERATION OUTPUT 40 Vpp differential
OUTPUT IMPEDANCE $2 \times 50 \ \Omega$
<b>TEST INPUT</b> active high voltage > 3V







This datasheet can be reviewed or updated without notice