

# Libra Motion Unit Technical Data Sheet

Parameter	Value(s)	Units
<b>Physical</b>		
Dimensions (width, length, height)	30x41x14	mm
Mass	15	gram
<b>Dynamic</b>		
Measurement range (sensor full scale)	+/- 5	g
Resolution nominal (typical)	12.2	milli-g
Scale factor (typical)	82	counts/g
Sample Rate (maximum), each axis	200	Hz
Cross axis sensitivity at 1g (typical) <sup>1</sup>	<2	counts
Non linearity	<1	% full scale
Noise at 200 samples per second (typical) <sup>2</sup>	0.5	counts rms
Mechanical shock withstand (0.5msec haversine)	>2000	g
<b>Electrical</b>		
Current consumption (nominal, supplied by host PC)	46	mA
<b>Environment</b>		
Temperature Range (operational)	-10 to +60	°C
Temperature range (full specification)	+10 to +40	°C
Temperature range (storage) <sup>3</sup>	-25 to +70	°C
Ingress protection (IP) rating	40	
Temperature influence (typical full spec. range)	<1	% reading
<p>1. The extent to which 1g applied on one axis influences the readings on the orthogonal axes.</p> <p>2. The root mean-squared fluctuation on a large set of readings on a stationary unit.</p> <p>3. Limited by the ABS enclosure: electronic components -40 to +125°C.</p>		

For more information please email: [sales@etb.co.uk](mailto:sales@etb.co.uk)