





	PERMANENTLY INSTALLED SINGLE AXIS SENSORS	PERMANENTLY INSTALLED TRIAXIAL SENSORS
		
Installation Requirements	Requires 3 sensors and 3 measurement locations for 3 measurement readings (X, Y, Z)	Requires 1 sensor for 3 measurement readings (X, Y, Z)
Sensor Cost	Lower cost	Higher cost
Installation Costs	Higher cost	Lower cost
Installation Considerations	Needs 3 mounting spaces and related mounting hardware for permanent installations	Needs 1 mounting space and related mounting hardware for permanent installations.
Cabling Costs	Higher cost Requires the purchase of 3 cordsets. For long cable runs, this can add greater expense.	Lower cost Only requires the purchase of 1 cordset. For longer cable runs, this can be a great cost saver compared to single axis sensors.
Performance Considerations	Less mass and stiffness which provides more data on high frequencies. More accurate readings on X axis and Y axis because of the placement of the single access accelerometer	More mass and stiffness which provides less data on high frequencies.

	PORTABLE MEASUREMENT SINGLE AXIS SENSORS	PORTABLE MEASUREMENT TRIAxIAL SENSORS
		
Data Collection Requirements	<p>Requires 1 sensor and 3 measurement locations for 3 measurement readings (X, Y, Z).</p> <p>Backup sensors are recommended in case sensors are dropped or damaged on the route.</p>	<p>Requires 1 sensors for 3 measurement readings (X, Y, Z).</p> <p>Backup sensors are recommended in case sensors are dropped or damaged on the route.</p>
Sensor Cost	Lower cost	Higher cost
Installation Considerations	<p>Needs 3 mounting spaces prepared for 3 measurement readings.</p> <p>For machines with measurement locations in hard-to-reach places, this poses potential human safety risks.</p>	<p>Needs 1 mounting space prepared for 3 measurement readings.</p> <p>For machines with measurement locations in hard-to-reach places, this provides a benefit to eliminate human safety risks.</p>
Cabling Costs	<p>Lower cost</p> <p>Backup cables are always recommended in case damage occurs on the route.</p>	<p>Higher cost</p> <p>Backup cables are always recommended in case damage occurs on the route.</p>
Performance Considerations	<p>Higher resonant frequency allows for wider frequency response range.</p> <p>More accurate readings on X axis and Y axis because of the placement of the single access accelerometer.</p>	<p>Lower resonant frequency allows for a limited frequency response range.</p>
Collection Time	Longer collection time due to having to take readings from 3 measurement locations.	Shorter collection time due to having all the readings taken from 1 measurement location.