




Measurement Instruments

Do you know what kind of hazards your product is being exposed to? You really should, because when products are damaged while being manufactured, shipped, or used, the only effective way to uncover the cause is by using optimized field data recording practices and a high quality data logger.



Lansmont offers two primary categories of Field Instruments: Measurement and Monitoring. Step 1 of Lansmont's Six Step Method calls for Defining of the Environment. Measurement Instruments provide the ability to record nearly everything that occurs during a recording session. Whether significant or not, Lansmont Measurement Instruments store up to tens of thousands of events, which can be used to clearly assess, characterize, and define various environments.

		SAVER™ 3D15	SAVER™ 3X90	SAVER™ 9X30
				
		Ideal for low-frequency dynamics, which may occur in aerospace, amusement park rides, rail impacts, crash recording, brake testing, and others.	Characterizing complete dynamic and environmental conditions (temperature and humidity) as they exist in longer-term transport conditions.	Same as 3X90 with external dynamic channel connections and the ability to seamlessly link all data to GPS location, all in one data file.
	Size	3.7 x 2.9 x 1.7 in. (95 x 74 x 43 mm)	3.7 x 2.9 x 1.7 in. (95 x 74 x 43 mm)	5.0 x 4.9 x 1.7 in. (127 x 124 x 43 mm)
	Weight	16.7 oz. (473 g)	16.7 oz. (473 g)	35.0 oz. (1 kg)
	Triggering	threshold and timer	threshold and timer	threshold and timer
	Memory	128 MB	128 MB	128 MB
	Programmable Sampling	50-5,000 samples per second	50-5,000 samples per second	50-10,000 sample per second
	Programmable Filtering	10, 20, 25, 50, 100, 200, 250, 500 Hz	10, 20, 25, 50, 100, 200, 250, 500 Hz	10, 20, 25, 50, 100, 200, 250, 500 Hz external channels: 1,000, 2,000, 2,500 Hz
	Continuous Record Time	15 days	90 days	30 days
	Accelerometer Type	triax MEMS	triax piezoelectric	triax piezoelectric
	Accelerometer Range	50 g	200 g	200 g
	3dB Frequency Response	DC to filter maximum	0.4 Hz. to filter maximum	0.4 Hz. to filter maximum
Data	Shock	✓	✓	✓
	Vibration	✓	✓	✓
	Temperature	✓	✓	✓
	Humidity	✓	✓	✓
	Atmospheric Pressure			✓
	GPS Location	able to import external data	able to import external data	optionally embedded in 9X-GPS
	External Acceleration Channels			6 programmable

Monitoring Instruments

Step 2 of Lansmont’s Six Step Method calls for Defining a Product’s Fragility. How many G’s can the product withstand, how much velocity change, and at what frequencies do the product’s components resonate? That information serves as the benchmark to which one can compare with field data captured with Monitoring Instruments. With monitoring, the focus is clear. Typically only data that exceeds predetermined threshold/severity/fragility levels is captured.

Lansmont offers the industry’s most robust line of unattended, battery operated data loggers, as well as turnkey transportation monitoring services to fulfill your field data acquisition requirements. We’re the leader in this highly specialized field and we offer sophisticated products and services to assist your company in its efforts.

		SAVER™ GPS	SAVER™ AM
		 Monitoring of location, speed and direction at user-defined timer intervals.	 Monitoring for critical shock events, as well as temperature, humidity and atmospheric pressure, light and orientation data – providing corresponding LED alarm indicators for all critical data.
	Size	3.9 x 4.3 x 2.2 in. (98 x 109 x 55 mm) with flanges	2.8 x 3.6 x 1.3 in. (71 x 91 x 33 mm) w/flanges
	Weight	10 oz. (283 g)	10 oz. (283 g)
	Triggering	user-defined timer interval	threshold acceleration and timer environmental
	Memory	up to 18,000 events	400 largest threshold events, 10,000 timer events
	Programmable Sampling	timer interval user-defined	500-3,000 samples per second
	Programmable Filtering		50, 100, 250, 300 Hz
	Continuous Record Time	30 days	30 days
	Accelerometer Type		triax piezoelectric
	Accelerometer Range		100 g or 200 g (selectable)
	3dB Frequency Response		0.5 Hz to filter maximum
Data	Shock		✓
	Vibration		✓
	Temperature		✓
	Humidity		✓
	Atmospheric Pressure		✓
	Orientation		✓
	Light		✓
	GPS Location	able to merge GPS data into simultaneously captured SAVER AM, 3D, 3X and 9X SXd files	able to import external data