



SAVER™ 3M30



The SAVER™ 3M30 and 3M30 Plus are self-powered field data recorders with an internal tri-axial accelerometer. The 3M30 Plus is provided with temperature, humidity and atmospheric pressure sensors. The 3M30s are powered by a USB-rechargeable lithium ion battery, providing up to 30 days of continuous operation.

Measure



Test



Monitor



Field-to-Lab™

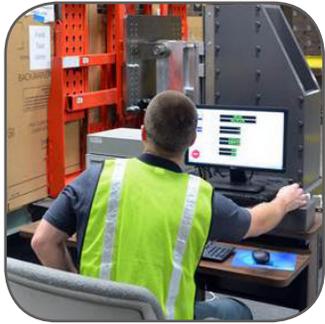
- Measure**
Measure transport hazards in the field.
- Test**
Use the results to construct laboratory testing.
- Monitor**
Continue monitoring the field to see if anything changes.



SAVER™ 3M30



FEATURES



Field-to-Lab®

Use SaverXware™ software to analyze data captured with SAVER™ instruments, and seamlessly create random vibration test profiles that can be easily imported into Lansmont TouchTest Vibration Controllers for immediate use. Only Lansmont offers this cross-platform integration.



30 Day battery Life:

The SAVER™ 3M30 is powered by a lithium ion, rechargeable battery, and provides continuous operation for up to 30 days. The battery is charged through the USB cable connection.

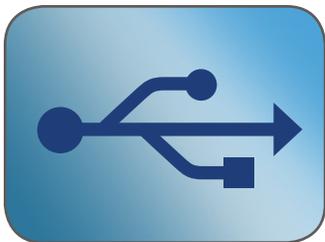


T/RH and Atmospheric Pressure Sensors:

The 3M30 Plus utilizes three atmospheric sensors, providing even further event measurement detail. All sensors are tied to

LED overlay indicators so that when a predetermined threshold is exceeded, the LED will provide immediate and constant verification of that occurrence.

OPTIONS



External Power:

For some recording applications, 30 days may not be enough recording time. Not a problem. The ability to charge the 3M30's battery through the USB connection provides unique versatility. 5V power sources

delivering 500mA current can extend the 3M30 run time indefinitely.



Mounting Kits:

Mounting kits can make it easier to fix SAVER™ 3M30's to vehicles or structures. Kits include mounting plates and attachment hardware. If you are attaching to a ferrous surface, magnetic mounting kits are available.



Data Analysis Center:

Trust Lansmont data specialists to interpret your data and provide you with even greater confidence. Lansmont data specialists are experts at acquiring,

analyzing and summarizing data; if you need help defining parameters or protocols, we can help. We can provide quick, relevant answers to your question through focused solutions like our **Simple Health Monitor Report**.



SAVER™ 3M30



SaverXware™

Each SAVER™ purchase includes Lansmont's SaverXware™, the easy-to-use software that communicates with the SAVER™ 3M30 for setup prior to recording — as well as data analysis once you've collected some data. Data analysis features include drop heights, impacts, vehicle motion, vibration, as well as temperature and humidity cycles.



Measurement Setup

Users are provided with simple, standard setup gateways for common measurement applications. Advanced setup options provide complete control over all setup parameters, providing unparalleled capability for instrument users.



Data Analysis

Powerful individual and multi-event summary analyses providing time-history, frequency domain, and vector visualizer playback and review.



Summary Reporting and Export

Generate user-defined project summary reports and print to document measurement results. Additionally, export the project data itself to ASCII files for analysis and reporting using universally available software applications.



Event Table and History

Multi-data files can be viewed in single, common project databases. The data file's measured events are chronologically presented in event tables, which are positioned underneath measurement Quick Histories. The Quick Histories display the captured data from the project

beginning to end in one view. Corresponding event thumbnails are updated as different events are highlighted in the table.



Summary Event Selection

Extremely useful event selection options based upon acceleration and Grms levels, time occurrence, type of event and even impact type and orientation. A quick history zoom-to-summary option with user-defined range cursors is provided as an alternative summary selector.



GPS Integration

Externally captured GPS data can be imported and automatically synchronized with SAVER™ 3M30 data to add further value and definition to your measurement results.



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MONITORING APPLICATIONS

The 3M30 and 3M30 Plus instruments represent the most affordable performance monitoring devices on the market. These instruments serve as entry-level data recorders within the SAVER™ family designed for high volume monitoring applications. Use 3M30 instruments to determine when, and even where any design threshold criteria are exceeded during actual use or transport of products.



Manufacturing



Vehicles



Structural Measurements



Asset Transport



Oil Platforms



Amusement Rides



Off Road Measurements



Packages



Aerospace

Effective integration of measurement and monitoring programs provide customers the ability to:

- Characterize the dynamic and climatic hazards within a given environment
- Establish product design criteria
- Develop laboratory testing and simulation criteria
- Audit distribution channels and carriers
- Establish liability in transport damage situations
- Determine normal vs. abnormal handling and transport of your goods
- Create climatic histograms of environmental conditions (Temp/RH)



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SPECIFICATIONS

	3M30	3M30 PLUS		3M30	3M30 PLUS
PHYSICAL			ENVIRONMENTAL		
Envelope Size:	3.1 x 2.9 x 1.3 in. (79 x 74 x 33 mm)	3.1 x 2.9 x 1.3 in. (79 x 74 x 33 mm)	Operating Temperature:	-20° to +60°C (-4° to +140°F)	-20° to +60°C (-4° to +140°F)
Volume:	11.7 in. ³ (193 cm ³)	11.7 in. ³ (193 cm ³)	Communications Temperature:	0° to +60°C (32° to +140°F)	0° to +60°C (32° to +140°F)
Chassis Material:	6061-T6 anodized aluminum	6061-T6 anodized aluminum	Battery Charging Temperature:	0° to +45°C (32° to +113°F)	0° to +45°C (32° to +113°F)
Weight:	14.0 oz. (397 grams)	14.0 oz. (397 grams)	Temperature Measurement Range:	N/A	-20 to +60°C (-4 to +140°F)
Environmental:	Weather Resistant	Weather Resistant	Temperature Measurement / Accuracy:	N/A	±1.0°C from +5° to +40°C ±2.0°C from -20° to +60°C
Mounting:	4 thru holes for #6 screws	4 thru holes for #6 screws	Humidity Measurement Range:	N/A	5% to 95% RH, non-condensing
DATA ACQUISITION			Humidity Measurement / Accuracy:	N/A	± 4% from 5% to 95% RH at 25°C
Sampling Rates:	100, 200, 500, 1,000, and 2,500 samples per second	100, 200, 500, 1,000, and 2,500 samples per second	Atmospheric Pressure Measurement Range:	N/A	10 to 1100 mbar
A/D Conversion:	12-bit	12-bit	Atmospheric Pressure Measurement Accuracy:	N/A	±4 mbar from 750 to 1100 mbar at 25°C
Accelerometer Type:	Tri-axial piezoelectric	Tri-axial piezoelectric	POWER		
Acceleration Ranges:	100 g (full scale)	100 g (full scale)		Rechargeable lithium ion battery, extended run time options available	Rechargeable lithium ion battery, extended run time options available
Anti-Alias Filter:	3-pole, low pass filter 10, 20, 50, 100 and 250 Hz	3-pole, low pass filter 10, 20, 50, 100 and 250 Hz	SOFTWARE / COMMUNICATIONS		
3-dB Frequency Response:	0.5 Hz to filter setting	0.5 Hz to filter setting	User Interface:	SaverXware™ software	SaverXware™ software
Measurement Accuracy:	±5% with nominal variations ±5% with nominal variations in temperature and frequency	±5% with nominal variations ±5% with nominal variations in temperature and frequency	Compatibility:	Microsoft Windows® XP (SP3), Vista, 7	Microsoft Windows® XP (SP3), Vista, 7
DATA RECORDING			COM Interface:	COM Interface USB 1.1 or 2.0 compatible	COM Interface USB 1.1 or 2.0 compatible
Signal Trigger:	User programmable acceleration (g) threshold	User programmable acceleration (g) threshold	Data Rate:	400 kB/s (typical)	400 kB/s (typical)
Timer Trigger:	N/A	10 minute interval for Temperature, Humidity and Atmospheric Pressure	CONTROLS AND INDICATORS		
Pre-Trigger:	User-programmable signal event pre-trigger	User-programmable signal event pre-trigger	Controls:	Run / Stop button	Run / Stop button
Data Retention Modes:	Max. Overwrite	Max. Overwrite	LED Indicators:	Green / Yellow: Run / Stop Yellow: Battery Red: Shock Alarm	Green / Yellow: Run / Stop Yellow: Battery Red: Shock Alarm Red: Temperature Alarm Red: Humidity Alarm Red: Pressure Alarm
MEMORY					
Memory Size:	20 most significant events	100 most significant events			
Memory Type:	FLASH	FLASH			
Memory Retention:	Retains data even when batteries are exhausted	Retains data even when batteries are exhausted			

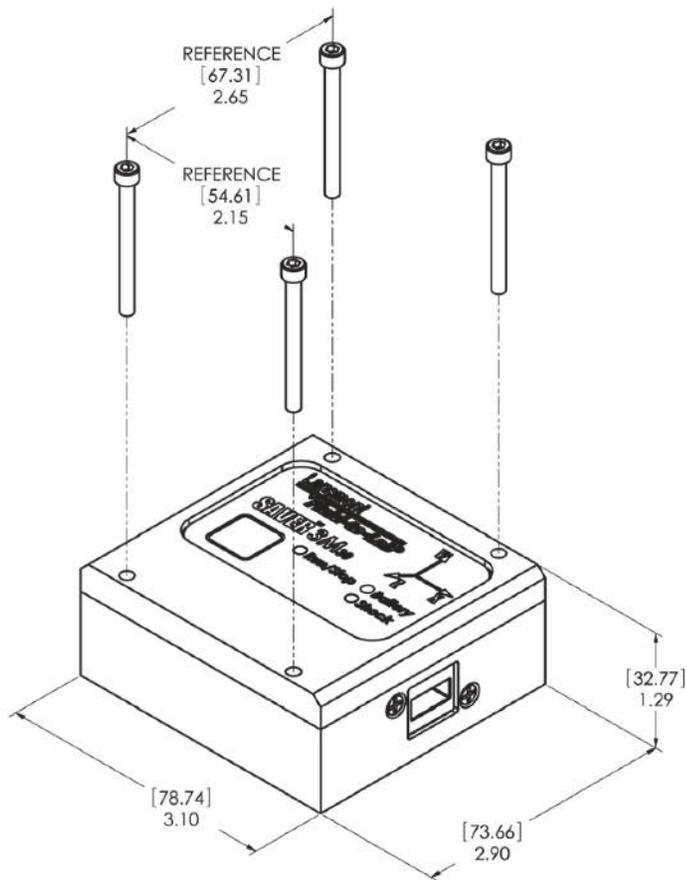


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SYSTEM DRAWINGS – MOUNTING DIMENSIONS

ISOMETRIC VIEW

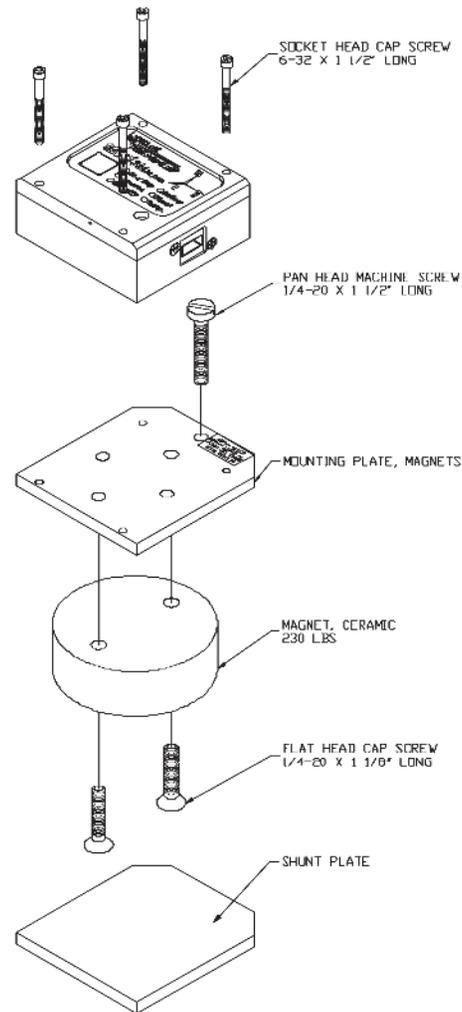


(Dimensions are identical for 3M30 and 3M30 PLUS)

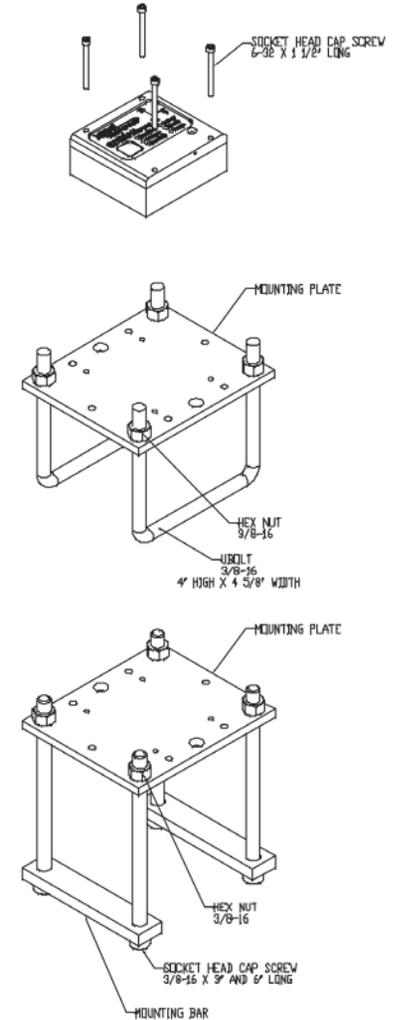
Note: Dimensions in inches [millimeters]

MOUNTING OPTIONS

MAGNET MOUNT



STANDARD MOUNT



Note: Dimensions in inches [millimeters]