



SAVER™ AM



The SAVER™ AM is a self-powered field data recorder with an internal tri-axial accelerometer. The SAVER™ AM is provided with temperature, humidity and atmospheric pressure sensors, as well as both light and orientation sensors. The AM is powered by a USB-rechargeable lithium ion battery, providing up to 30 days of continuous operation.

Measure



Test



Monitor



Field-to-Lab™

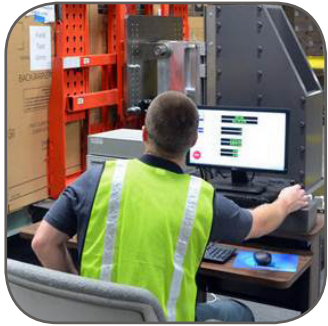
- Measure**
Measure transport hazards in the field.
- Test**
Use the results to construct laboratory testing.
- Monitor**
Continue monitoring the field to see if anything changes.



SAVER™ AM



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™ AM 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.

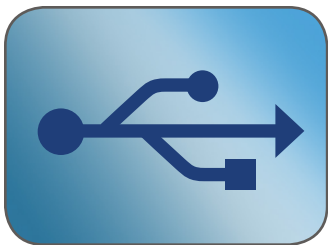


T/RH and Atmospheric Pressure Sensors:

The AM 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 AM's battery through the USB connection provides unique versatility. 5V power sources

delivering 500mA current can extend the AM's run time indefinitely.



Mounting Kits:

Mounting kits can make it easier to fix SAVER™ AM'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.



Light and Orientation Sensors:

The AM incorporates light and orientation sensors, providing useful information about an item's journey. Was the vehicle door or crate opened - was the

product rotated on it's end? The AM can conclusively provide those answers.



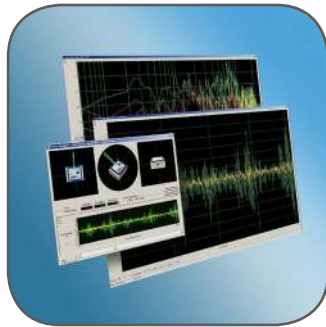
SaverXware™

Each SAVER™ purchase includes Lansmont's SaverXware™, the easy-to-use software that communicates with the SAVER™ AM 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

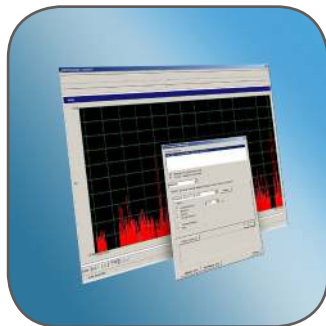
Generate user-defined project summary reports and print to document measurement results. Additionally, export the project data itself to ASCII files for analysis and reporting using universally available software applications.



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™ AM data to add further value and definition to your measurement results.



SAVER™ AM



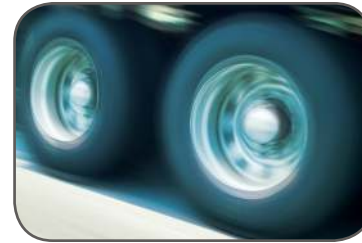
MONITORING APPLICATIONS

Designed for high volume monitoring applications, the SAVER™ AM instrument is one of the most affordable performance monitoring devices on the market, and serves as the entry-level data recorder within the SAVER™ family

Use the SAVER™ AM 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)



SAVER™ AM



SPECIFICATIONS

PHYSICAL

Envelope Size:	2.8 x 3.6 x 1.3 in. (71 x 91 x 33 mm) w/flanges
Chassis Material:	6061-T6 anodized aluminum
Weight:	10 oz. (283 grams)
Environmental:	Weather Resistant
Mounting:	4 holes on mounting flanges for #6 screws

DATA ACQUISITION

Sampling Rates:	500 - 3,000 samples/sec
A/D Conversion:	12-bit
Accelerometer Type:	Tri-axial piezoelectric
Acceleration Ranges:	100 or 200 g full scale (selectable)
Anti-Alias Filter:	5-pole, low-pass Bessel filter 50, 100, 250, and 300 Hz (cut-off frequency)
3-dB Frequency Response:	0.5 Hz to filter maximum
Temperature Measurement / Accuracy:	-20° to +60°C (-4° to +140°F) ±1.0°C from +5° to +40°C; ±2.0°C from -20° to +60°C
Humidity Measurement / Accuracy:	5% to 95% RH, non-condensing ± 4% from 5% to 95% RH at 25°C
Atmospheric Pressure Measurement / Accuracy:	10 to 1100mbar ± 4mbar from 750 to 1,100mbar at 25°C

DATA RECORDING

Signal Trigger:	User-programmable acceleration (g) threshold
Signal Event Pre-Trigger:	User-programmable
Data Retention Modes:	Max. Overwrite, Fill / Stop, Wrap / Overwrite

MEMORY

Signal Events (Waveforms):	400 largest
Memory Type:	FLASH
Memory Retention:	Retains data even when batteries are exhausted
Timer Events (environmental):	10,000
Timer Interval:	User programmable "wake-up" interval

ENVIRONMENTAL

Operating Temperature:	-20° to +60°C (-4° to +140°F)
Communication Temperature:	0° to +60°C (32° to +140°F)
Temperature Measurement / Accuracy:	-20° to +60°C (-4° to +140°F) ±1.0°C from +5° to +40°C; ±2.0°C from -20° to +60°C
Humidity Measurement / Accuracy:	5% to 95% RH, non-condensing ± 4% from 5% to 95% RH at 25°C
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POWER

Rechargeable lithium ion battery
Extended run-time options available

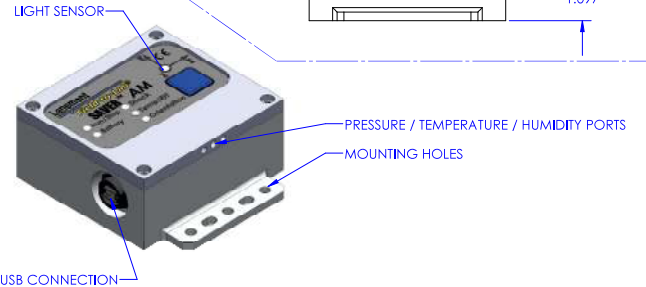
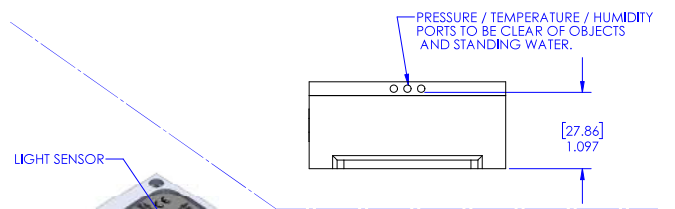
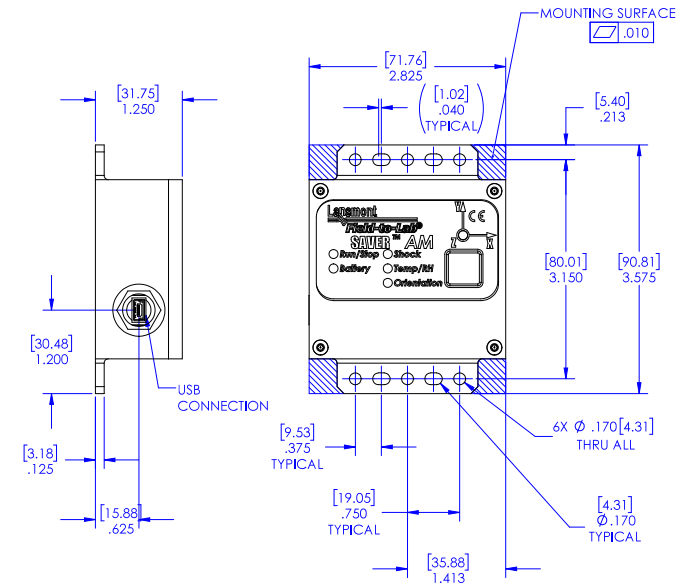
SOFTWARE / COMMUNICATIONS

User Interface:	SaverWare™ software
Compatibility:	Microsoft Windows® 7, 8, 8.1, 10 (32 or 64-bit)
COM Interface:	USB 2.0 compatible
Data Rate:	400 kB/s (typical)

CONTROLS AND INDICATORS

Controls:	Run / Stop button
LED Indicators:	Run / Stop: Green: Run / Amber: Stop Battery: Green (>20% Capacity) Amber (<20% Capacity) Shock: Red Temp/RH: Red Orientation: Red

SYSTEM DRAWINGS – MOUNTING DIMENSIONS



Note: Dimensions in inches [millimeters]