



LMS SCADAS Recorder

Freedom at your fingertips



Designed for hassle-free testing, the LMS SCADAS Recorder is the ideal solution for difficult or atypical applications like a wind turbine or motorcycle. Unlike classical recorders, the fully autonomous LMS SCADAS Recorder does not require a PC or remote control to successfully record raw time data and stream it directly to a secure CompactFlash® memory card.

Connected to a PDA, the LMS SCADAS Recorder allows you to monitor channel overloads and the remaining battery operation time. By eliminating blind recording, the LMS SCADAS Recorder not only saves you time, it makes sure that the data you acquire is exactly what you need to get the job done. The embedded UTP interface also allows the operation of the LMS SCADAS Recorder as a PC front-end system for in-field or laboratory applications.

As an all-rounder, the LMS SCADAS Recorder is seamlessly integrated with the LMS Test.Lab, LMS Test.Xpress and LMS TecWare software for noise, vibration and durability analysis. The integration of data acquisition and analysis considerably improves data consistency and allows users to reliably compare data sets.

LMS SCADAS Recorder at a glance

- Reduce overall hardware cost and eliminate inconvenience
- One platform process for data acquisition and analysis improves data consistency
- Save time and increase data quality with fast, single-run data acquisition
- On-the-spot validation prevents errors and annoying reruns
- Channel independent frequencies for fast data acquisition speeds



Versatile 3-in-1 functionality

Compatible with major sensor types, this innovative recorder features three-in-one functionality. For quick on-the-go data acquisition, it is a practical standalone data recorder that operates without a PC connection thanks to the embedded data acquisition engine and its handy CompactFlash® data storage card. Integrate a Microsoft Windows Mobile PDA and it can act as an enhanced “smart” data recorder for on-the-spot data monitoring and measurement validation. Ever the all-rounder, it is also a perfect data acquisition front-end for lab-based and in-field measurements.

Autonomous data recording

The LMS SCADAS Recorder operates 100% autonomously. The LMS SCADAS Recorder is particularly suited for challenging test applications, such as motorcycles, off-road vehicles, large-scale production plants or wind turbines, where using a PC-based data acquisition unit would be unpractical or impossible. The unit simply saves the acquired data on the CompactFlash® card along with the required conversion format for further analysis on-site or back at the office.

Smart recording

Using the Bluetooth® antenna and a Microsoft Windows Mobile PDA, LMS SCADAS Recorder users can control and monitor the entire measurement process via the PDA's easy-to-use graphical user interface. This direct feedback about the recording status per channel includes overload, min, max, broadband RMS, RPM, GPS and CAN-bus data. Engineers can access instant embedded intelligent documentation in various formats including Word, Excel or HTML.

Flexible data acquisition front-end

The LMS SCADAS Recorder can also be used as a PC front-end system for laboratory and in-field testing. This indoor-outdoor flexibility is the perfect way to reduce overall hardware cost and to eliminate the hassle and inconvenience of switching systems. The LMS SCADAS Recorder is seamlessly integrated with the LMS software for noise, vibration and durability testing and analysis, delivering optimal data quality and consistency.

The LMS SCADAS Recorder not only saves you time, it makes sure that the data you acquire is exactly what you need to get the job done.

Go anywhere reliability

Designed for extremes

A compact take-anywhere solution, the LMS SCADAS Recorder is designed for on-the-go measuring without a PC. A rugged instrument with true MIL-STD-810F compliancy, the LMS SCADAS Recorder's sturdy and robust design can stand up to the most extreme climate conditions from -10°C to +55°C as well as 60gpk shock and 7.7grms vibration. The secure data storage and an integrated internal battery guarantees 3 hours of operation, making it possible to run the LMS SCADAS Recorder unattended.

No risk data storage

Acquired data is stored on high-performance, fast read/write solid-state CompactFlash® memory cards – the most reliable portable memory devices on the market today. With direct 24-bit streaming, data is transferred to the CompactFlash® card at a speedy rate of 12Mb/second.

State-of-the art technology

The LMS SCADAS Recorder supports secure data quality and on-the-spot data validation with superior hardware technology. It includes 24-bit ADC per channel, 138dB SFDR, an analogue & digital anti-aliasing filter, ultra-low noise signal conditioning, and a channel-independent sampling frequency of 102.4 kHz.

Accurate data validation

High-channel density without compromising speed or quality

Measuring numerous signals requires a data acquisition system that offers a high-channel count without compromising system size, power consumption, frequency span and the throughput rate. The LMS SCADAS Recorder line-up can support 8 to 40 channels and up to 376 channels in a master slave configuration.

Accuracy guaranteed with instant data validation

Saving directly on high-performance, secure CompactFlash® cards, engineers can be fully confident in the test-run quality with instant data validation and the ability to translate the data into ready-to-use formats. This avoids typical test-run stress like faulty data storage, annoying reruns and time-consuming data translations.

During the recording process, the LMS SCADAS Recorder provides instant graphical and tabular feedback per channel right on the PDA-based remote control. Besides information such as overload, min, max, RMS, RPM, GPS and CAN-bus data channels, users can also access feedback regarding remaining battery time and remaining storage capacity.





Versatility:

- On-the-go measuring without a PC even in extreme conditions, difficult applications and atypical locations
- Smart recording with PDA integration for on-the-spot monitoring and validation
- Cover diverse in-field and lab testing applications with a single hardware system

Reliability:

- Rugged hardware avoids down-time during mission-critical in-field testing
- Grab-and-go design: compact, sturdy yet easy-to-transport
- Reliable data storage and 3-hour battery life for unattended testing

Accuracy:

- Ready-to-analyze data to take back to the office
- On-the-spot measurement assessment eliminates errors and reruns
- Easy identification - data runs are easily saved and labeled on the CompactFlash® cards



LMS SCADAS Recorder SCR01

LMS SCADAS Recorder SCR05

	LMS SCADAS Recorder SCR01	LMS SCADAS Recorder SCR05
Number of slots	2 (1 for system controller)	6 (1 for system controller)
Max number of channels per frame	8	40
Tacho inputs	2 (standard on board)	2 (standard on board)
Generator outputs	2 (standard on board)	2 (standard on board)
Dimensions (WxHxD)	203 x 58 x 260 mm / 7.99 x 2.28 x 10.24 inch	340 x 78 x 295 mm / 13.38 x 3.07 x 11.69 inch
Weight	2.5kg / 5.59lbs	6.2kg max / 13.67 lbs max
AC power input	110/220V	110/220V
DC power input	9-36V	9-36V
Max power consumption	15W	40W
Battery operation (minimum)	2.5 hours	1 hour (4 hours with additional slot battery)
Host interface	Ethernet	Ethernet
Operating temperature	-10°C to +55°C / 14° to 131°F	-10°C to +55°C / 14° to 131°F
Sensor type	V, ICP, MIC, charge, bridge, digital audio	V, ICP, MIC, charge, bridge, digital audio
Environmental standard	MIL-STD-810F compliant, (60gpk shock/7.7grms vibration)	MIL-STD-810F compliant, (60gpk shock/7.7grms vibration)
Remote control unit	Wireless via Bluetooth	Wireless via Bluetooth
Solid state memory	High-performance CompactFlash®	High-performance CompactFlash®
Master/Slave interface	Not applicable	Optical



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