



SYSTEMS FOR REMOTE NOISE MONITORING



SOUNDADVISOR™ NOISE MONITORING SYSTEMS

Portable and Permanent Installations



www.larsondavis.com | sales@larsondavis.com | 716.926.8243

 **LARSON DAVIS**
A PCB PIEZOTRONICS DIV.



SoundAdvisor™ Noise Monitoring Systems

When you need to accurately measure and identify noises at a remote location, Larson Davis has a number of solutions for you. Noise monitoring systems from Larson Davis help streamline your remote noise monitoring, saving you from unnecessary trips into the field. At the heart of both the Portable and Permanent SoundAdvisor™ Noise Monitoring Systems is the SoundAdvisor Model 831C Sound Level Meter. Model 831C is an IEC 61672-1:2013, ANSI S1.4-2014 Class 1 integrating sound level meter with capabilities customizable to your application.

Larson Davis Noise Monitoring Systems offer you access to measurements and event alerts from any Internet connected device, allowing you to spend time in the office rather than traveling to remote locations. For the life of your system, as part of our commitment to Total Customer Satisfaction, we offer you free firmware upgrades to keep your system up-to-date as well as support from our team of trained application engineers. We know what it takes to make your measurements. We are here to support you.

PORTABLE NOISE MONITORING Model NMS044

The SoundAdvisor Portable Noise Monitoring System Model NMS044 is a completely wireless solution designed to run indefinitely on solar power, allowing you to both take measurements and view them 24 hours a day, seven days a week. A rugged, portable Pelican® case houses the Model 831C sound level meter, 12 V battery, power supply, and gateway (modem) as well as a pole supporting your microphone. Wherever remote noise monitoring takes you, Model NMS044 offers a range of capabilities in a portable package.

- **Easy Deployment** – the complete Model NMS044 system is lightweight to move from site to site, utilizes wireless connections for transfer of data and can also be solar powered
- **Reliable Simplicity** – all your key elements fit in or are attached to a portable case – from meter to modem, the system is modular and user friendly
- **Current Connectivity** – with 4G LTE capabilities, NMS044 is future proofed against 2G and 3G obsolescence
- **Available to Rent** – units are available for short or long term rentals through our sister company, The Modal Shop

With decades of experience in creating outdoor noise monitoring solutions, Larson Davis has created the NMS044 as a system for applications such as:

- **Consultancy Projects** – The portability of NMS044 offers an ideal solution for consultants performing noise studies for different customers in different locations on a regular basis
- **Short-Term Airport Noise Monitoring** – Airport noise is frequently a complaint for those living nearby and in landing patterns. The NMS044 allows airports to monitor noise issues as they arise in specific locations.
- **Short-Term Construction Noise Monitoring** – Monitoring during a building period is often of a short-term commitment that recurs with each new project. When one job is complete, pack up the NMS044 and move to the next location.

Options below detail battery and solar panel power choices

Model*	Batteries	Portable Solar Panel
NMS044-SLA60	35 Ah SLA battery (lower cost)	60 W
NMS044-SLA100		100 W
NMS044-LFP60	45 Ah LiFePo** battery (lighter weight)	60 W
NMS044-LFP100		100 W

* For use in North America add "-U" to model, for Rest of World add "-E" to model
** LiFePo battery cannot be shipped by common carrier without a hazardous material shipping license



NMS044 INCLUDES	
SoundAdvisor 831C	Sound level meter, class 1
831C-LOG	Data logging firmware option
831C-ELA	Event processing option
831C-SW	USB driver for gateway
EPS044	Weatherproof outdoor hard case
COM-RV50-DC*	4G LTE gateway
PRM2103-FF	Outdoor preamplifier with calibration check
EPS2116	Outdoor microphone and preamplifier protection
SLP001 or SLP002	60 W or 100 W solar panel
BAT019 or BAT020	45 Ah LiFePro battery or 35 Ah SLA battery
PSA039	AC power supply
Misc	Cables and accessories
Communication	4G LTE and optional WiFi or Ethernet
Software	LD G4 Utility

Noise Monitoring Simplified

There are many benefits to choosing a SoundAdvisor Portable or Permanent Noise Monitoring System. No matter which you choose, you'll enjoy the following:

24/7 Network Access – Log in from your computer, smartphone, or other mobile device to engage directly with the meter at your remote location. Make updates, receive alerts, change test parameters, check microphone calibration, and download data with ease.

Real-Time Alerts – Receive email or texts with data and sound recordings when set noise limits are exceeded. Allows quick response to compliance concerns and listening to sounds for source identification.

Time Matters – Each system automatically syncs with Internet-based time sources, keeping your data accurate with time zone or Daylight Savings Time changes

Remote Power – Either solar panel or line power offers continuous, sustainable means to keep your measurements running

PERMANENT, LONG-TERM NOISE MONITORING Model NMS045

The SoundAdvisor Permanent Noise Monitoring System Model NMS045 is available in a variety of configurations to meet your long-term monitoring needs. Model NMS045 shares many of the same benefits as the Model NMS044, from 24/7 connectivity to continuous power capabilities, designed to simplify your testing. Now, the key elements of the portable system are available in a permanent setup, encased in a fiberglass enclosure mounted to a permanently placed pole. When you need to monitor the same location long-term, the NMS045 is the right choice for you.

- **Rugged Reliability** – an environmental protected enclosure and durable mounting options create an easy-to-maintain solution for your permanent monitoring
- **Installation Simplicity** – a range of installation options coupled with a low power design allow you to run your system with a battery charged via a solar panel or through an AC main
- **Flexible Placement** – when AC power isn't available or is costly to run, remote deployment is simplified with solar powered options
- **Connectivity is Key** – 4G cellular, WiFi, or wired networks allow you to control your meter and view your data from anywhere

Larson Davis knows permanent noise monitoring requirements vary. We have made the NMS045 highly flexible yet still easy to use. It is ideal for applications such as:

- **Permanent Airport Noise Monitoring** – NMS045 allows airports to meet their requirements for long term noise monitoring, delivering a broad scope of measurement data continuously
- **Long-Term Construction Noise Monitoring** – When construction will be a long term long project, NMS045 is a permanent monitoring solution offering durability and protection against vandalism and damage, so your measurements can continue uninterrupted
- **Permanent City Noise Monitoring** – Whether you are monitoring near a bridge, busy street, factory, or nightclub, NMS045 helps you continuously measure noise levels, providing the data to create a more pleasant and ordinance-compliant community

Configurable Options	
Power	Solar or AC
Battery	1 or 2 batteries (12 V) can be either <ul style="list-style-type: none"> • 45 Ah LiFePo (BAT019-045) • 35 Ah SLA (BAT020-045)
Mounting	Tilt-down pole (TR019), wooden pole, or wall
Communication	4G LTE gateway, Ethernet or WiFi
Weather sensor	Optional wind or full meteorological sensor



NMS045 INCLUDES	
SoundAdvisor 831C	Sound level meter
831C-LOG	Data logging firmware option
831C-ELA	Event processing option
831C-SW	USB driver for modem
EPS045	Fiberglass enclosure
PRM2103-FF	Outdoor preamplifier with calibration check
EPS2116	Outdoor microphone and preamplifier protection
Misc	Cables and accessories
Communication	4G LTE and Ethernet included
Software	LD G4 Utility

NMS044 - PORTABLE NOISE MONITOR	
Dimensions	
EPS044	24 × 14 × 7 inches (61 × 36 × 18 cm)
SLP001 (folded)	26 × 14 × 3 inches (66 × 36 × 8 cm)
SLP002 (folded)	20 × 27 × 3 inches (50 × 69 × 8 cm)
Weight	
NMS044 only	18 lb (8.2 kg) – without battery and solar panel
SLP001 (60 W panel)	20 lb (9 kg)
SLP002 (100 W panel)	27 lb (12.3 kg)
BAT019 (45 Ah LiFePo)	13 lb (5.8 kg)
BAT020 (35 Ah SLA)	25 lb (11.2 kg)
NMS044-LFP60	50 lb (23 kg)
Operational Time (Typical @ 20 °C)	
831C only	14 days with 45 Ah LiFePo (BAT019) 11 days with 35 Ah SLA (BAT020)
831C with 4G	6 days with 45 Ah LiFePo (BAT019) 4 days with 35 Ah SLA (BAT020)
831C with WiFi	10 days with 45 Ah LiFePo (BAT019) 7 days with 35 Ah SLA (BAT020)
831C with Ethernet	10 days with 45 Ah LiFePo (BAT019) 7 days with 35 Ah SLA (BAT020)
NMS044 with solar panel	Indefinite with adequate sunlight

MODEL NUMBER	DESCRIPTION
Portable Noise Monitoring Systems	
NMS044-LFP60*	Complete NMS including Model 831C with 831C-LOG, 831C-ELA, 831C-SW, EPS044-LFP (includes BAT019), COM-RV50-DC*, 2 ea. COM-ANT-HG, PRM2103-FF, EPS2116, SLP001, PSA039 & necessary cables. For use when solar insolation > 2 kW•h/m ² /day
NMS044-LFP100*	Complete NMS including Model 831C with 831C-LOG, 831C-ELA, 831C-SW, EPS044-LFP (includes BAT019), COM-RV50-DC*, 2 ea. COM-ANT-HG, PRM2103-FF, EPS2116, SLP002, PSA039 & necessary cables. For use when solar insolation > 1 kW•h/m ² /day
NMS044-SLA60*	Complete NMS including Model 831C with 831C-LOG, 831C-ELA, 831C-SW, EPS044-SLA (includes BAT020), COM-RV50-DC*, 2 ea. COM-ANT-HG, PRM2103-FF, EPS2116, SLP001, PSA039 & necessary cables. For use when solar insolation > 2 kW•h/m ² /day
NMS044-SLA100*	Complete NMS including Model 831C with 831C-LOG, 831C-ELA, 831C-SW, EPS044-SLA (includes BAT020), COM-RV50-DC*, 2 ea. COM-ANT-HG, PRM2103-FF, EPS2116, SLP002, PSA039 & necessary cables. For use when solar insolation > 1 kW•h/m ² /day

* For use in North America add "-U" to model, for Rest of World add "-E" to model



3425 Walden Ave, Depew, NY 14043 USA

Phone +1 716.926.8243 | Toll-Free in USA 888.258.3222

Fax +1 716.926.8215 | Email sales@larsondavis.com

Website larsondavis.com

ISO 9001 CERTIFIED

NMS045 - PERMANENT NOISE MONITOR	
Mechanical	
EPS045 dimensions	19.7 x 18.2 x 10.4 (50 x 47 x 27) – H x W x D
TRP019 height	Approximately 20 ft (6 m) to microphone

MODEL NUMBER	DESCRIPTION
Permanent Noise Monitoring Systems	
831C-045-AC	NMS045 base components for AC powered system. Includes 831C, 831C-ELA, 831C-LOG, 831C-SW, PRM2103-FF, EPS2116, CBL222-20, PSA040, DVX013, CBL235, 831-MEM32G & mounting hardware
831C-045-S	NMS045 base components for solar powered system. Includes 831C, 831C-ELA, 831C-LOG, 831C-SW, PRM2103-FF, EPS2116, CBL222-20, CBL226-03, DVX013, CBL235, CBL233-12, 831-MEM32G & mounting hardware
EPS045-AC	NMS045 fiberglass instrument enclosure for AC powered systems. Includes surge suppressor & hardware for mounting to TRP019 tilt-down pole.
EPS045-AC-OPT1	NMS045 fiberglass instrument enclosure for AC powered systems. Includes surge suppressor, ADP100 & hardware for mounting to a wall or wooden pole. Holes for conduit not drilled.
EPS045-S	NMS045 fiberglass instrument enclosure for solar powered systems. Includes PSA038 & hardware for mounting to TRP019 tilt-down pole.
EPS045-S-OPT1	NMS045 fiberglass instrument enclosure for solar powered systems. Includes PSA038, ADP100 & hardware for mounting to a wall or wooden pole. Holes for conduit not drilled.
BAT019-045	45 Ah 12 V LiFePo battery for NMS045. Includes CBL225-01 & CBL232-02 (requires hazardous materials shipping license to ship by common carrier)
BAT020-045	35 Ah 12 V SLA battery for NMS045. Includes CBL225-01 & CBL232-02
COM-RV50-45*	Sierra Wireless RV50 cellular 4G (XLTE) universal gateway, uses customer supplied SIM card
SEN031-045	NMS045 meteorological sensor with ultrasonic wind speed and direction, temperature, humidity, barometric pressure & rainfall. Includes CBL229-20, DVX008A and ADP101 for installation on TRP019.
SEN032-045	NMS045 ultrasonic wind speed and direction sensor. Includes CBL229-20, DVX008A and ADP101 for installation on TRP019.
SLP003	100 W solar panel with bracket & U-bolts for mounting to TRP019.
TRP019-B	NMS045 tilt-down aluminum pole for AC power. Includes pole, 426A12-NPT, ADP100, lock and accessories
TRP019-S	NMS045 tilt-down aluminum pole with holes for solar power. Includes pole, 426A12-NPT, ADP100, lock and accessories
TRP019-W	NMS045 tilt-down aluminum pole for AC power with holes for TRP012 weather sensor mount. Includes pole, TRP012, 426A12-NPT, ADP100, lock and accessories
TRP019-WS	NMS045 tilt-down aluminum pole with holes for solar power and TRP012 weather sensor mount. Includes pole, TRP012, 426A12-NPT, ADP100, lock and accessories

Larson Davis provides complete solutions for noise and vibration measurement and analysis. From stand-alone, simple-to-use instruments to complete systems including sensors, data acquisition, and software, Larson Davis has what you need.

As a part of MTS Systems Corporation, Larson Davis guarantees **Total Customer Satisfaction** through our outstanding limited warranty; no-charge, 24-hour, toll-free technical support; global distribution; and worldwide customer service.