SOUNDAdvisor™ noise monitoring systems
Portable and Permanent Installations
**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 more 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

<table>
<thead>
<tr>
<th>Model*</th>
<th>Batteries</th>
<th>Portable Solar Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS044-SLA60</td>
<td>35 Ah SLA battery (lower cost)</td>
<td>60 W</td>
</tr>
<tr>
<td>NMS044-SLA100</td>
<td>100 W</td>
<td></td>
</tr>
<tr>
<td>NMS044-LFP60</td>
<td>45 Ah LiFePo** battery (lighter weight)</td>
<td>60 W</td>
</tr>
<tr>
<td>NMS044-LFP100</td>
<td>100 W</td>
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</tbody>
</table>

* 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.

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**NMS045 INCLUDES**

<table>
<thead>
<tr>
<th>Configurable Options</th>
<th>Includes</th>
</tr>
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<tbody>
<tr>
<td>Power</td>
<td>Solar or AC</td>
</tr>
<tr>
<td>Battery</td>
<td>1 or 2 batteries (12 V) can be either</td>
</tr>
<tr>
<td></td>
<td>• 45 Ah LifePo (BAT019-045)</td>
</tr>
<tr>
<td></td>
<td>• 35 Ah SLA (BAT020-045)</td>
</tr>
<tr>
<td>Mounting</td>
<td>Tilt-down pole (TR019), wooden pole, or wall</td>
</tr>
<tr>
<td>Communication</td>
<td>4G LTE gateway, Ethernet or WiFi</td>
</tr>
<tr>
<td>Weather sensor</td>
<td>Optional wind or full meteorological sensor</td>
</tr>
</tbody>
</table>

- **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**

<table>
<thead>
<tr>
<th>Dimensions</th>
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<tbody>
<tr>
<td>EP044</td>
<td>24 × 14 × 7 inches (61 × 36 × 18 cm)</td>
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<tr>
<td>SLP001 (folded)</td>
<td>26 × 14 × 3 inches (66 × 36 × 8 cm)</td>
</tr>
<tr>
<td>SLP002 (folded)</td>
<td>20 × 27 × 3 inches (50 × 69 × 8 cm)</td>
</tr>
</tbody>
</table>

**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)
- 831C with 4G: 6 days with 45 Ah LiFePo (BAT019)
- 831C with WiFi: 10 days with 45 Ah LiFePo (BAT019)
- 831C with Ethernet: 10 days with 45 Ah LiFePo (BAT019)
- NMS044 with solar panel: Indefinite with adequate sunlight

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**NMS045 - PERMANENT NOISE MONITOR**

**Mechanical**

- EP045 dimensions: 19.7 × 18.2 × 10.4 (50 × 47 × 27) – H × W × D
- TRP019 height: Approximately 20 ft (6 m) to microphone

**Model Number | Description**

<table>
<thead>
<tr>
<th>Permanent Noise Monitoring Systems</th>
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<tbody>
<tr>
<td>831C-045-AC</td>
</tr>
<tr>
<td>831C-045-S</td>
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</table>

| 831C-045-AC-OP1 | NMS045 fibreglass instrument enclosure for AC powered systems. Includes surge suppressor & hardware for mounting to TRP019 tilt-down pole. |
| 831C-045-AC-OPT1 | NMS045 fibreglass instrument enclosure for AC powered systems. Includes surge suppressor, ADP100 & hardware for mounting to a wall or wooden pole. Holes for conduit not drilled. |
| 831C-045-S | NMS045 fibreglass instrument enclosure for solar powered systems. Includes PSA038 & hardware for mounting to TRP019 tilt-down pole. |
| 831C-045-S-OP1 | NMS045 fibreglass 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, DXV008A and APD101 for installation on TRP019 |
- SEN032-045 | NMS045 ultrasonic wind speed and direction sensor. Includes CBL229-20, DXV008A and APD101 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 |

For use in North America add “-U” to model, for Rest of World add “-E” to model.