



# munisense

## MSSP7

# Noise monitoring station class 2

The INSIGHTNOW™ measurement system is optimized for remote measurements and disclosing measurement data via the internet.

Our sophisticated family of rapidly deployable, energy efficient, wireless noise monitoring stations (NMS), store their measurement data in real time in the INSIGHTNOW™ cloud platform.

### Secure data

Our noise meters comply to IEC 60651/60804/61672 class 2 and are very suitable for temporary measurements. The NMS can be used indoor as well as outdoor and measure all noise parameters, 1/3 octave spectral data and support audio streaming. The NMS also store their measurement data as well as the audio internally, so data is never lost.

### LTE-M communication

The NMS use the secure IoT-communication LTE-M, which allows measurements where 4G coverage is insufficient.

The NMS is read via the INSIGHTNOW™ platform. Consequently they are small and very energy efficient and the measurement data is fully optimized in the platform, to suit the role and function of the user.

### Self-sufficient

The INSIGHTNOW™ meters have an extreme low energy consumption, and operate for **six days** on the rechargeable Li-Ion battery.

An optional battery pack extends operation to **more than 20 days**. Combining the meter with a small solar panel allows continuous measurements.

**IEC 60651/60804/61672, class 2**

**LTE-M IoT communication; reliable and energy saving, 20 days operation**

**Upto 3 months internal data storage and audio**

**Realtime and online, self-sufficient, wireless and self-restoring**

**Data visualisation and analysis in powerful online INSIGHTNOW™ platform**



| Munisense Class 2 Noise Monitoring Station | SP7 LTE-M                  |
|--|----------------------------|
| <b>Standard</b>                            |                            |
| IEC 60651/60804/61672                      | Class 2                    |
| <b>Measured values</b>                     |                            |
| $L_F, L_{MAX}, L_{EQ}, L_E, L_i, L_{ATM5}$ | Yes                        |
| Advancing $L_{EQ}, T,$                     |                            |
| $T = 1, 60, 180, 300, 900, 3600$ sec       | Yes                        |
| $L_{EQ}, T, T = 0, 125$ sec                | Yes                        |
| Frequency weightings                       | dB(A), dB(C)               |
| Time weighting                             | Fast, Slow, Impulse, Peak  |
| Measurement range total                    | 30 - 140 dB(A)             |
| Measurement ranges (overlap)               | 4                          |
| Resolution                                 | 0,01 dB                    |
| Accuracy                                   | 1,5 dB                     |
| Noise floor of the meter                   | 25 dB(A)                   |
| Spectra, 1/3 Octa                          | 31,5 Hz - 4 KHz            |
| Audio                                      | OggVorbis quality (11 kHz) |
| <b>Microphone</b>                          |                            |
| Type                                       | Omni                       |
| Diameter                                   | 1/2"                       |
| Heater                                     | Yes                        |
| Weather protection                         | PC                         |
| <b>Storage</b>                             |                            |
| Levels (second values)                     | 6 months                   |
| Spectra                                    | 6 months                   |
| Audio                                      | 3 months                   |
| Capacity                                   | 64 Gb                      |
| <b>Network</b>                             |                            |
| WAN  | LTE-M                      |
| Authentication (server and client)         | TLS v1.2                   |
| LAN  | ZigBee                     |
| <b>Energy</b>                              |                            |
| Consumption                                | 0,2 W                      |
| Consumption using audio                    | 0,3 W                      |
| Consumption using LTE-M                    | 0,5 W                      |
| Connecting adapter                         | 12 - 30 V                  |
| Supports solar energy (MPPT)               | Yes                        |
| Battery (Li-Ion)                           |                            |
| Capacity                                   | 105 Wh                     |
| Operating time                             | 4 - 10 days                |
| <b>Environmental conditions</b>            |                            |
| Temperature                                | -20 - 60 °C                |
| Temperature charging Li-Ion battery        | -20 - 45 °C                |
| Humidity                                   | 10 - 99 %                  |
| Ingress Protection                         | IP65                       |
| <b>Other conditions</b>                    |                            |
| Accuracy timestamp                         | 250 ms                     |
| GPS location                               | Optional                   |
| Device temperature visible online          | Yes                        |
| Device humidity visible online             | Yes                        |
| <b>Dimensions and weight</b>               |                            |
| Dimensions (L x W x H)                     |                            |
| Body and microphone                        | 80x60x400 mm               |
| Incl. weather protection                   | 80x60x480 mm               |
| Incl. weather prot. and antenna            | 80x60x540 mm               |
| Weight                                     | 1200 grams                 |

\* Percentile  $L_{(95)}, L_{10}, L_{NN}$  / Equivalent noise  $L_{EQ}$  (1 second - 1 year) / Dose effect noise  $L_{EA}$  CEL



Class 2 noise meter

**Optional:**

- Robust transport case CAS3 for max. 2 SP7 meters and accessoires
- Accupack UP1 (+ 20 days)
- Solar panel SOL (continuous measurements)
- Powersupply CH1 for lamp post (IP67)



**About Munisense**

Munisense develops, produces, supplies and manages innovative measurement solutions for businesses and governments. Solutions that give stakeholders direct online insight into noise, water quality, water levels and air quality. The information is online available at any time for visualization, analysis or periodic reports. This way managers and policymakers can measure in real time; remotely, reliable and smarter.

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**munisense**  
INSIGHTNOW™