



munisense

Noise meters 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, weather-resistant small wireless noise meters, store their measurement data in real time in the INSIGHTNOW™ cloud platform.

Our noise meters comply to IEC 60651/60804/61672. The meters can be used indoor as well as outdoor and measures all noise parameters, 1/3 octave spectral data and supports audio streaming. Unlike other noise meters, an INSIGHTNOW™ meter is read via the INSIGHTNOW™ cloud platform. Consequently the meters are small and very energy efficient and the measurement data is fully optimized in this platform to suit the role and function of the user.

Self-sufficient

The INSIGHTNOW™ meters have extreme low energy consumption, and operate ten days on a rechargeable Li-Ion battery. An optional battery pack extends operation to more than 40 days. Combining a meter with a small solar panel allows continuous measurements.

Covering a geographically large area

The meters are suitable for applications where energy or the internet may not be available. Up to 40 noise meters can be wirelessly connected to a network. This network can span a large area such as an inner city. The meters are linked to the INSIGHTNOW™ platform via a gateway. Optionally the noise meters can be equipped with an internal 4G modem to connect to the platform without the remote gateway.

**Small and very energy efficient;
measuring more than 10 days**

Realtime and online

**Self-sufficient, wireless and
self-restoring**

Readout via INSIGHTNOW™ platform

IEC 60651/60804/61672 Class 2



Munisense Noise Meters	SP4 series	SP8
Standard		
IEC 60651/60804/61672	Class 2	Class 2
Measured values		
$L_F, L_{MAX}, L_{EQ}, L_{TMS}, L_E, L_{PEAK}$	Yes	Yes
Spectra		
Octave	No	No
1/3 Octave	No	No
Audio (OggVorbis)	SP4A-LA	Optional
Direction source	No	No
Calculated values *	Yes	Yes
Sampling		
(125 ms - jaren)	Yes	Yes
Time weightings		
Fast, Slow, 62,5 ms	Yes	Yes
Frequency weightings		
dB(A), dB(C)	Yes	Yes
Measurement range		
Total range	30 - 130 dB	30 - 130 dB
Measured ranges **	3	3
Resolution	0,01 dB	0,01 dB
Time stamp (accuracy)	<10 ms	<10 ms
Measurement times	Yes	Yes
Microphone type	1/4"	1/4"
	Class 2	Class 2
Weather protection		
Type	Class 2	Optional
Moisture absorbent	No	No
Measurement direction		
	Vertical	Vertical
	Horizontal	Horizontal
Environmental conditions		
Temperature	-20 - 70 °C	-20 - 70 °C
Humidity	20 - 99%	20 - 99%
Long-term outdoor measurements	Yes	No
Energy		
Consumption	75 mW, SP4 200 mW, SP4A-LA	90 mW
Connector adapter	12 - 30V	5V (USB)
Supports Solar energy	Yes	No
Battery (Li-Ion)		
Capacity	54WH	15WH
Operating time (days)	5	3
Network		
ZigBee router compatible	Yes	Yes
Max. ZigBee network size	40	40
Max. distance between meters outdoors	250 m	150 m
GPRS / HSPA		
Integrated	Optional	No
Via Gateway	Yes	Yes
Integrated GPS	Optional	No
Dimensions and weight		
Dimensions (L x W x H) (mm)		
Body and microphone	80 x 60 x 200	40 x 40 x 220
+ Weather protection	80 x 60 x 260	40 x 40 x 300
+ Weather protection, antenna	220 x 60 x 320	40 x 40 x 300
Weight (grams)	950	300
Mounting		
Pole clamp (20..80 mm)	Included	No
Mast (27 mm)	Optional	No
Mounting bracket	No	Yes

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

** Measurement range:

SP 4 30-90 dB / 50-110 dB / 70-130 dB
 SP 8 30-90 dB / 50-110 dB / 70-130 dB



Optional:

Accupack 4P1
(+ 40 days)



Solar panel TPSO1
(continuous)



About Munisense

Munisense develops, sells and manages highly innovative real-time and online measurement and control solutions for business and government. Solutions that provide immediate insight in noise, vibrations, water levels, energy use, lighting, water and air quality and that allows effective control over lighting levels, ventilation, and pump activity. Our INSIGHTNOW™ meters are connected to our INSIGHTNOW™ cloud platform where the data is stored in real-time for analysis, visualisation and reporting. The information from the platform can be viewed in a range of specific visualisations any time, any where through a web browser or using our phone or tablet apps. Our applications are developed in close cooperation with universities, governments, partners and customers.

Munisense BV
 Fruitweg 36
 2321 DH LEIDEN
 The Netherlands

info@munisense.com
 T +31 (0)71-711 4623
 www.munisense.com

munisense
 INSIGHTNOW™