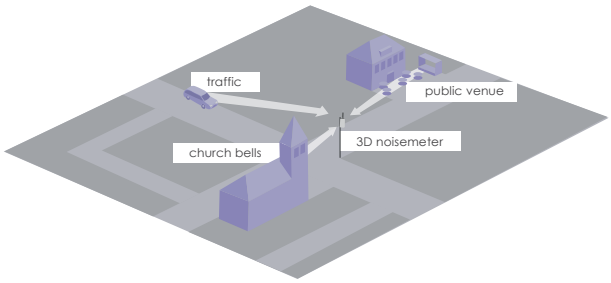
munisense

3D Noise meter



When measuring noise remotely it is important to additionally know the source of the noise. This can be determined by spectral correlation with meters at the source or by listening to the audio recording. The first option requires more noise meters and the second option is labor intensive, especially for long measurements. However, the INSIGHTNOW™ 3D noise meters easily remotely detect audio sources and classify them automatically.

Besides recording the noise, the 3D noise meter also records the direction of the noise in horizontal and vertical planes. As the noise direction is measured each second, the distribution of the sources and their noise contribution to the measurement are plotted over a period of time. In this way, a quick insight is gained into the cause of excess noise and interfering noises are filtered out.

The 3D noise meter allows to:

- Pinpoint public premises and venues causing inconvenience.
- Indicate if the measured noise is actually coming from the premises measured or to determine whether there is interfering noise.
- Distinguish noise from rail, road or plane, and filtering this noise.
- To locate noise sources at a site and to distinguish it from noise from outside the premises.

Real time and online

Recording of the direction of the noise

Classification of sources

Filtering interfering noise

IEC 60651/60804/61672 Class 2

Munisense 3D Noise Meter	Model SP5
Standard	
IEC 60651/60804/61672	Class 2
Measured values	
L_F, L_{MAX}, L_{EQ}, L_{TM5}, L_E, L_{PEAK}	Yes
Spectra	
Octave	No
1/3 Octave	No
Audio (OggVorbis)	Optional
Combination with class 1 meter	Yes
Direction source	Yes
Calculated values *	Yes
Sampling	
(125 ms - jaren)	Yes
Time weightings	
Fast, Slow, 62,5 ms	Yes
Frequency weightings	
dB(A), dB(C)	Yes
Measurement range	
Total range	30 - 130 dB
Measured ranges **	3
Resolution	0,01 dB
Time stamp (accuracy)	<10 ms
Measurement times	Yes
Microphone type	4x Cardioid
Weather protection	
Type	Class 2
Moisture absorbent	No
Measurement direction	Vertical Horizontal
Environmental conditions	
Temperature	-20 - 70 °C
Humidity	20 - 99%
Long-term outdoor measurements	Yes
Energy	
Consumption	100 mW
Connector adapter	12 - 30V
Supports Solar energy	Yes
Battery (Li-Ion)	
Capacity	54WH
Operating time (days)	8
Network	
ZigBee router compatible	Yes
Max. ZigBee network size	40
Max. distance between meters outdoors	250 m
GPRS / HSPA	
Integrated	Optional
Via Gateway	Yes
Integrated GPS	Optional
Dimensions and weight	
Dimensions (L x W x H) (mm)	
Body and microphone	80 x 60 x 320
+ Weather protection	80 x 60 x 420
+ Weather protection, antenna	80 x 60 x 570
Weight (grams)	1100
Mounting	
Pole clamp (20..80 mm)	Yes
Mast (27 mm)	Optional
Mounting bracket	No

* 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:
SP5 30-90 dB / 50-110 dB / 70-130 dB

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.

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