munisense

Noise meters class 1 certified

Measuring noise remotely has never been easier and more reliable. The MSSPC noise measurement system: rapidly deployable, energy efficient, weatherproof, wireless, LTE-M communication.

Optimized for temporary use

MSSPC is optimized for temporary noise measurements such as monitoring music events, construction activities and noise complaints. The system functions without power for a long time, up to 8 days on the internal battery, and with an external battery pack or solar panel continuously.

Internal data storage prevents loss of measurement data should the connection to the platform fail. The system also uses LTE-M communication, that allows deployment of the meter at remote locations. The compact MSSPC can be attached to a lighting or measuring mast easily and quickly, at any height. It can be managed remotely and is suitable for measurements in places without internet and/or energy facilities. The optional GPS function flawlessly registers the measurement location.

Data immediately available

The MSSPC streams all noise parameters, spectral information and audio in real time to the Munisense platform. Within seconds upon receipt the data is available for (automatic) analysis, reporting and alarms. The measurement system supports progressive noise values, virtually all internationally standardized noise parameters and the 1/3 octave bands from 10 Hz to 20 kHz, which are sampled every second.

Audio can be streamed to the platform in real time for instant listening. In addition, the audio is stored in the meter to retrieve relevant audio (automatically) afterwards, This saves a lot on telecom costs.

IEC 60651/60804/61672 certified class 1

Suitable for legal use

Optimized for temporary measurements Internal storage protects all data

Prepared for connecting weatherstations

platform. Within seconds upon receipt the data

Munisense Class 1 meters	MSSPC
Standard	
IEC 60651/60804/61672	Class 1
PTB Admission MSSPC pending, N	ISSPA: ZDS-DE-16-M-PTB-0058
Measured values	
Supported noise levels L Advancing L _{EQ}	L _F , L _{MAX} , L _{EQ} , L _E , L _i , L _{PEAK} , L _{ATM5} CF, LCS, LCF _{MAX} , LCS _{MAX} , LC _{EQ} , LI _{EQ} , LI _{MAX} T= 1, 60, 180, 300, 900, 3600 sec
Percentiles * Other calculated values * Frequency weightings Time weighting Measurement range total Measurement ranges (overlap)	L _{nn} (nn can be any value) CEL, tonality, dB(A), dB(C) Fast, Slow, Impulse, Peak 20 - 140 dB(A) 2
Resolution Accuracy Noise floor of the meter Spectra, 1/3 Octa Audio	0,01 dB 0,7 dB 5 dB(A) 10 Hz - 20 kHz OggVorbis quality (8 kHz)
Microphono	
Microphone Type Diameter Heater Microphone cable extendable Weather protection	Omni ½" Yes upto 10 m RVS
Storage	
Levels (second values) Spectra Audio Capacity	6 months 6 months 2 months 64 Gb
Network	
WAN Authentication (server and client) LAN	LTE-M TLS v1.2 ZigBee
Energy	
Consumption Consumption using audio Consumption using LTE-M Connecting adapter Supports solar energy (MPPT) Battery (Li-Ion) Capacity	0,2 W 0,3 W 0,6 W 12 - 30 V Yes 105 Wh
Operating time	4 - 10 days
Environmental conditions	
Long term outdoor measurements Temperature Temperature charging Li-Ion batter Humidity Ingress Protection	Yes -20 - 60 °C ry -20 - 45 °C 10 - 99 % IP65
Other conditions	
Accuracy timestamp GPS location Device temperature visible online Device humidity visible online	100 ms Optional: MSSPC-G Yes Yes
Dimensions and weight	
Dimensions (L x W x H) (mm) Body and microphone Incl. weather protection Incl. weather prot. and antenna Weight (grams)	80x60x360 80x60x480 80x60x620 1500
Accessories	
Robust transportcase CAS4 for 2 MSSPC meters and accessories	

Connects other equipment

The MSSPC can connect to other systems, such as weather stations, intelligent battery packs, air quality stations, other noise monitoring stations and alarms, both wireless and wired. This allows shared facilities such as telecom, data storage and energy.

LTE-(

Reliability

More than 10 years of experience with real-time remote measurements are bundled in the MSSPC. The measurement system is extremely easy to use, robust and remotely fully controllable.

About Munisense

Munisense develops, produces, supplies and 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 managers and policymakers can measure in real

munisense **INSIGHTNOW**[®]

Munisense BV Fruitweg 36 2321 DH LEIDEN The Netherlands

- Accupack UP2, for 20 extra days operation
- Solarpanel SOL, for continuous measurements
- Powersupply CH1 for connection to a lighting mast (IP67)
- * Percentile L(95), L10, LNN / Equivalent noise LEQ (1 second -1 year) / Dose effect noise LEA CEL / Lax (nuisance)