munisense

NP-series Noise monitoring stations

A sophisticated family of fast, energy-efficient, weatherproof, wireless noise monitoring stations that store their measurement data real-time in the INSIGHTNOW™ cloud portal.

Optimal for permanent measuring

The NP monitoring stations are optimized for permanent measurement networks, such as the continuous monitoring of urban areas, around event locations, port areas and industry. The NPx is completely autonomous, has its own communication, covers a power-free day period, is compact and requires no specific knowledge for installation or maintenance. The internal data storage prevents loss of measurement data if the connection to the platform is lost.

Real-time measurement and recognition

The NP can immediately recognize and classify sound in the living environment. With its highly sensitive weatherproof microphone and scalable processing power, the NP Series can process remotely customizable sound recognition models. The NP measures all common noise levels, spectral (1/3 octave bands) and statistical values in Europe and complies with the IEC 60651/60804/61672 class standards.

Audio can be streamed to the platform in real time for instant listening. In addition, audio in the NP is stored in WAF format.
All measurement data is available in real time in the INSIGHTNOW™ platform.

Applications

The affordable NP series can be used for a wide range of applications, such as sound management of events, construction and industry, but also for sound recognition and locating noisy vehicles, aircraft, fireworks, shouting, horns, alarm sounds, sirens, music, etc.

Sound recognition

IEC 60651/60804/61672

For permanent measuring networks

Connect to 4G and/or Ethernet

No data loss: internal data storage

Munisense NP-series:	NP2	NP4
Standard		
IEC 60651/60804/61672	Class 2	Class 1
External certification		N/A
Measured values		
Supported noise levels (1 sec.)	$LAF_{MIN \& MAX}$, $LAS_{MIN \& MAX}$, LA_{EQ}, $LCF_{MIN \& MAX}$, $LCS_{MIN \& MAX}$, LC_{EQ}	
Advancing L_{EQ}	T= 1, 2, 3, 5, 15, 30, 60 min.	
Percentiles (LAS and LAF 125 ms)	L0.5, L01, L02, L05, L10, L25, L50, L75, L90, L95, L99, L99.5	
	long term Harmonica Index,	
	1 hour , L_{day}, $L_{evening}$, L_{night}, L_{den}	
Noise recognition detection	Reporting start, duration,	
(conform ISO 20906)	top LAS, top LA_{EQ}, SEL noise type	
Frequency weightings	dB(A), dB(C) and dB(Z)	
Time weighting	Fast, Slow, Impulse	
Measurement range total	30 - 130 dB(A)	20 - 140 dB(A)
Measurement ranges (overlap)	1	2
Resolution	0,01 dB	0,01 dB
Accuracy	1,5 dB	0,7 dB
Noise floor meter (dB(A))	22 dB	5 dB
Spectra, 1/3 Octave	16 Hz - 10 kHz	10 Hz - 20 Khz
Audio	OggVorbis and/or WAV	
Sound recognition:		
Sound recognition ML models	vehicles, shouting, sirens, horns, bangs, music, etc.	
Realtime SoundScapes	supports GLIMI	
Microphone		
Type	Omni	Omni
Diameter	¼"	½"
Heating	Yes	Yes
Microphone cable extendable	No	up to 10 m
Weather protection	Poly Carbonate	RVS
Storage		
Levels (second values)	1 month	3 months
Spectra	1 month	3 months
Audio	1 week	1 month
Capacity	64 Gb	265 Gb
Network		
WAN:	4G, GPRS	
LAN:	WiFi, Ethernet	
Energy		
Consumption using 4G	3 W	
Connector adapter	12 - 30 V	
Supports solar energy (MPPT)	Yes	
Battery (Li-Ion)		
Capacity	105 Wh	
Operating time (days)	1 - 3	
Environmental conditions		
Long term outdoor measurements	Yes	
Temperature	-20 - 60 °C	
Temperature charging Li-Ion battery	-20 - 45 °C	
Humidity	10 - 99 %	
Ingress Protection	IP65	
Other conditions		
Timestamp (accuracy)	100 msec.	
Real time clock	Yes	
GPS lococation	Yes	
Device temperature visible	Yes	
Dimensions (LxWxH, in mm) **and weight**		
Body and microphone	80x60x400	80x60x440
Incl. weather protection	80x60x480	80x60x540
Incl. weather prot. and antenna	80x60x540	80x60x600
Weight (grams)	1200	1500
Accessories		
Supplied: pole clamp (20-80 mm), 5m power/ethernet cable		
Optional: transportcase CAS3, solar panel 30W, accupack UP2, lamp post connection set, 24V POE adapter, lamp post bracket, 20cm wind screen		

Model NP2   **Model NP4**

The NP series is available as a class 2 and as a class 1 system.

Some options:

Recycling e-waste
Of course you can deliver or send us your old Munisense devices. We then ensure that they are included in our recycling process.

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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