

# Noise Watch Monitoring Station

Soft dB Monitoring Services

Noise Watch Monitoring Station Is Compact, Rugged and Packed with Powerful Features

## Professional Grade Acoustical Measurements:

- Complies to IEC 61672/ANSI S1.4 Class 1
- Frequency Range: 20 Hz – 16 kHz

## Simultaneous Measurement and Recording of:

- Leq, Lmax, Lmin, Lpeak, and SEL in A, C, and Z weightings
- 7 Percentiles (LN%) for selected weighting (A, C or Z)
- 31.5 Hz to 8 kHz Octave Band Spectrum
- 400 lines FFT Spectrum

## Embedded Power Solution:

- Large battery providing 5-days run-time
- Optional solar kit providing unlimited power

## Impressive Data Storage Capacity:

- All parameters recorded (Leq, Lmax, Lmin, Lpeak, SEL, LN%, 1/1 Oct. and FFT)
- Memory buffer holding more than 135 000 records (without FFT, 16 000 records with FFT)
- Auto-store period from 1s to 1h, aligned on clock

## Compatible with Soft dB Monitoring Solution:

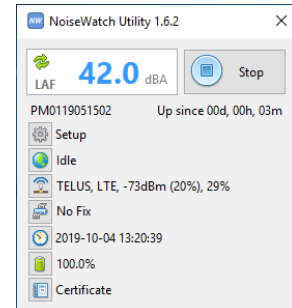
- Embedded 4G LTE module for data transfer, status, mail and SMS alerts
- Embedded GPS for accurate positioning and time synchronisation



## Simple Deployment Management Software

The Noise Watch Utility Software is a simple tool to setup the Noise Watch Station.

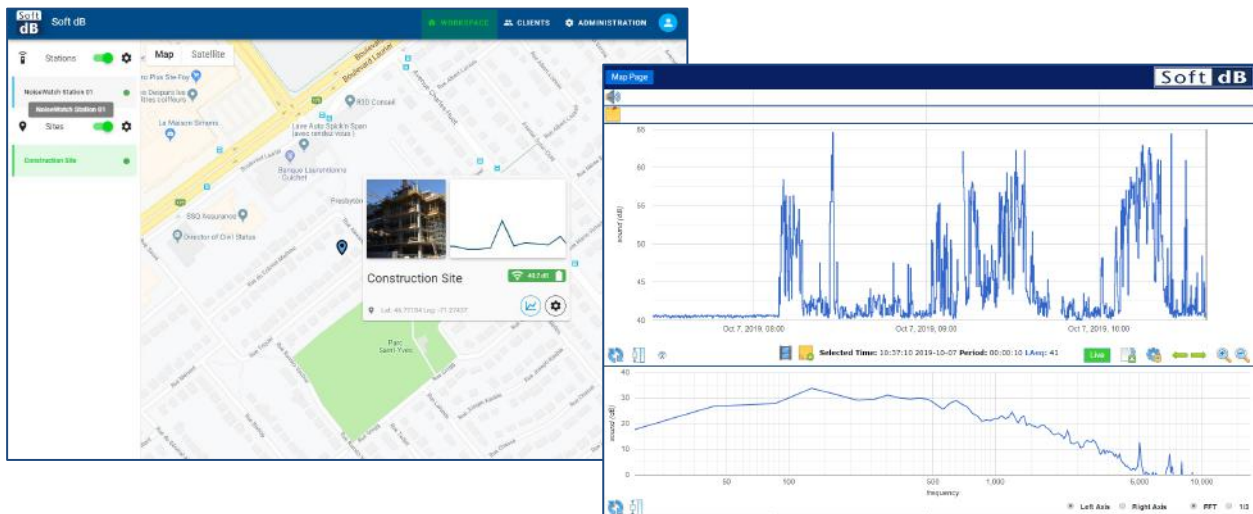
- Start/Stop the measurement;
- Change measurement setup (Input Range, Duration, FFT Span, etc.);
- Manage Web Service parameters (Records upload, Status upload, etc.);
- Manage records buffer (load records, clear buffer, etc.);
- View 4G modules status;
- View GPS module status;
- View battery status;
- View embedded calibration certificate.



## Web-Based Monitoring Platform

Soft dB Monitoring Platform is a self-service web application that brings significant value to both short and long-term unattended noise measurement campaigns:

- Manage all your monitoring stations (registration, GPS coordinates, Battery status, etc.);
- Set alerts for monitoring stations warnings (low battery, offline, etc.);
- Manage exceedance alerts (SMS an emails);
- Real-time records uploads;
- Secure data hosting;
- Manage period durations (10m, 1h, etc.);
- Assign Monitoring stations to measurement sites;
- Create client access pages for specific sites.



## Technical Specifications

Sound Level Meter	Noise Watch	Noise Watch XT
Standards	IEC 61672-1/ ANSI S1.4-1 (2013) Class 1, ANSI S1.43 (2007) Type 1, IEC 60651 (1979), Amd.1(1993-02), Amd.2(2000-10) Type 1	
Averaging	Exponential and Linear	
Time Weightings	Slow or Fast	
Frequency Weightings	A, C and Z	
Input Ranges	Only 1 range available	Low or High
Sampling Rate	44.1 kHz	
Measured Metrics	Leq, Lmax, Lmin, Lpeak, SEL, LN% (1%, 2%, 5%, 8%, 10%, 50%, 90%, 95%, 99%)	
Resolution	0.1 dB	
Peak Maximum Level	106 dBZpk	Low: 101 dBZpk, High: 121 dBZpk
Under-Range Level	26 dBA	Low: 21 dBA, High: 37 dBA
Electrical Noise Level	20 dBA	Low: 15 dBA, High: 31 dBA
Total Noise Level	26 dBA	Low: 21 dBA, High: 31 dBA
Microphone Nominal Sensitivity	30 mV/Pa	50 mV/Pa
Microphone Technology	Electret Condenser	IEPE Condenser
Standards	IEC 61260-1/ ANSI S1.11-1 (2014) Class 1	
Averaging	Linear (Leq)	
1/1 Octave Spectrum	31.5 Hz to 8 kHz	
FFT Spectrum	400 lines on 6 bandwidths from 17.2 kHz to 539 Hz	
<b>Timing</b>		
Record Duration	1s to 1h	
Record Duration Resolution	1s	
Recording Mode	Continuous auto-store	
Align on Real-Time Clock	Yes	
<b>Recording</b>		
Recording Data	All Global Metrics (A, C and Z), LN% (A, C or Z), 1/1 Octave, FFT (optional)	
Memory Capacity	Without FFT: 134 640 records, With FFT: 16 320 records	
Memory Type	Looping Buffer (older records are overwritten)	
<b>Monitoring</b>		
Cellular	4G LTE with HSPA+ fallback, embedded antennas	
GPS	56 Channels GPS, SBAS, QZSS, On-Board RTC	
Web Service	Soft dB smartMonitor™ Web Service	

## Technical Specifications (cont.)

Output		
Dynamic Range	0dB to 30dB Gain – Max $\pm 1.5V_{pk}$	
Connector	1/8" Jack Mono	
Environmental		
Operating Temperature	-20°C to 40°C	
Storage Temperature	-30°C to 50°C	
Certified to	NEMA Type 4 – IP66	
Power		
	Noise Watch	Noise Watch XT
Power	1.1W	1.5W
Battery	168 Wh (12V-14Ah)	
Battery Life (without solar pack)	132h (5days, 12h)	96h (4days)
Physical		
Height	324 mm (12 3/4")	
Width	273 mm (10 3/4")	
Depth	145 mm (6 5/8")	
Weight	8.9kg (19.6lbs)	
Accessories		
Windscreen	All Weather Protections	
BNC Cable	1.2m (4')	
USB Cable	0.9m (3') A to Micro-B	
Charger Pack	24VDC, 2A	
Calibration Certificate	Tested in accordance with procedures from IEC 61672-3 (2013)	
Solar Kit (Optional)	30W solar panel (345 x 605mm / 13.5 x 23.8")	
Pole-Mount Bracket (Optional)	Accepts pipe straps for pole diameter 3cm to 30cm (1 1/4" to 11")	

