

WATCHTM

CLASS 1 NOISE & VIBRATION MONITORING STATION

ALL YOUR ENVIRONMENTAL MEASUREMENTS.
POWERED BY SMART SENSORS TECHNOLOGY.



Soft dB

ENGINEERED FOR REAL-WORLD MONITORING CONDITIONS

THE WATCH WAS DESIGNED AROUND
THE REALITIES WE FACE IN THE FIELD.

Projects where data can only be captured once. Long-term monitoring where reliability is critical. Remote sites where field visits aren't an option. Complex setups requiring multiple sensors at once.

Too often, this means juggling multiple instruments, adding redundancies, and spending more time managing systems than generating value from data.

THE WATCH CHANGES THAT.

Designed with a true set-it-and-forget-it approach, the system only notifies you when it matters.

The Watch combines noise, vibration, blast overpressure, and weather measurements into a single, optimized monitoring system:

- Class 1 noise measurements (Leq, Lmax, Ln%, 1/3 octave, FFT, audio recordings)
- Advanced vibration monitoring (PPV, RMS, dominant frequency, 1/3 octave)
- Integrated environmental data (weather, with expandable measurement capabilities)
- Smart Sensors (simplified maintenance, integrated sensor check, interference-free digital signal, open architecture)

All measurements are synchronized and are remotely available in real time – as they are recorded. Not minutes or hours later. Instantly.

Proven in harsh environments, the Watch delivers reliable, high-quality measurements over the long term.

Built on decades of field expertise in acoustics and vibration, the Watch isn't just another monitoring station with a microphone bolted on. It's what a monitoring system should be today.

A system that adapts to your requirements — not the other way around.

KEY FEATURES

NO COMPROMISES. NO WORKAROUNDS.

EVERY PARAMETER. ONE STATION.

Simultaneously measure all key environmental parameters with a single integrated system, combining advanced acoustics and vibration monitoring for reliable, high-quality data, whatever the project.

- Class 1 Sound
(short- and long-term, streaming audio)
- Ground and structural vibration
(triaxial geophones, MEMS, borehole sensors)
- Weather
- Blast overpressure
- Infrasound
- Hydroacoustics



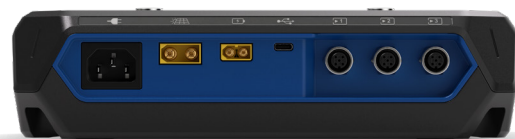
SMART SENSORS. LESS TIME ON SITE. BETTER DATA. MORE FLEXIBILITY.

Ensure reliable data measurements while minimizing maintenance and site interventions.

- Embedded signal processing enabling independent sensor certification
- Fully digital signal output, minimizing interference
- Integrated Sensor Check for simple remote validation
- Suitable for short and long-term measurements

Open architecture of our Smart Sensor technology.

- Native sensor compatibility with third-party data loggers
- Direct sensor connection to a tablet or PC for portable measurements
- Data logging directly on the Watch in standalone mode when no network is available



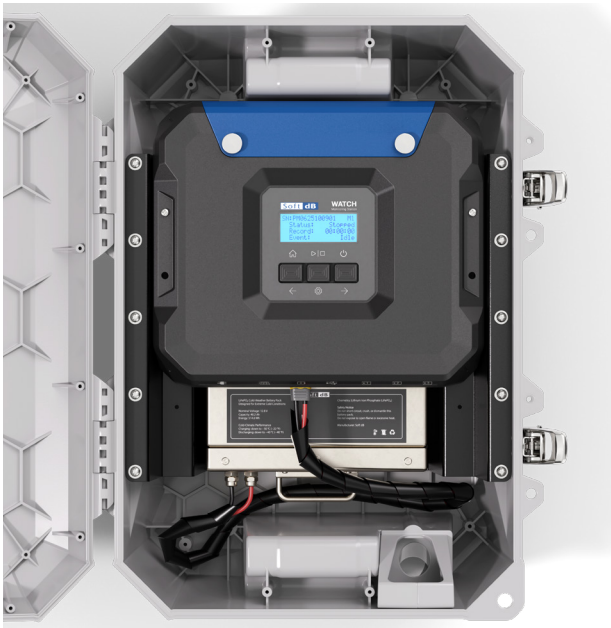
KEY FEATURES

NO COMPROMISES. NO WORKAROUNDS.

LOCAL DATA LOGGING. NO NETWORK REQUIRED.

Keep reliable data, even without connectivity.

- Continuous local data acquisition and storage – independent of network status
- Extended memory to prevent data loss during network outages
- Automatic sync when connectivity is restored
- Ideal for remote, underground, and isolated environments



EXTENDED BATTERY AUTONOMY. BUILT FOR THE FIELD.

Operate longer. Fewer interventions. Lower costs.

- Extended autonomy in cold-weather operating conditions
- Designed to minimize field interventions over long-term deployments



WEB PLATFORM. EVERYTHING IN ONE PLACE.

Access, analyze, and act on your data in real-time, 24/7, from anywhere.

- Advanced alert system
- All metrics available, with no hidden fees
- Secure data hosting
- Secure data sharing with tiered access levels — clients, regulators, internal teams
- Remote system integrity monitoring
- Analyze and compare noise, vibration, and more — on a single graph
- API integration to your existing monitoring platform
- AI-powered noise source classification

ADVANCED TECHNOLOGY. SIMPLIFIED OPERATION.

Stay up to date with our latest technology, with no hardware replacement required.

- Visual alerts for vibration monitoring, enabling live alerts and adjustments even without connectivity
- Continuous audio recording for effective community noise management
- Master Trigger™: automatic summary alerts and concise post-blast reports
- Over-the-air (OTA) updates, keeping your stations and sensors up to date remotely with no field intervention



ONE STATION. EVERY APPLICATION.



CONSTRUCTION



MINING & QUARRIES



INDUSTRIAL FACILITIES



PORTS & MARINE



INFRASTRUCTURE & RAIL



AIRPORTS



DATA CENTERS



SMART CITIES



RESEARCH



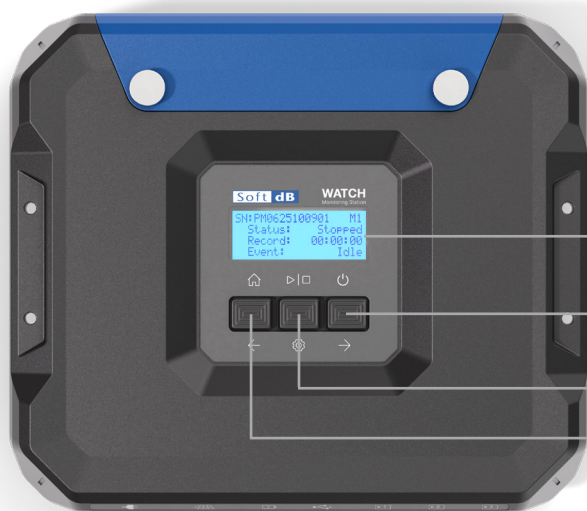
COMMUNITY MONITORING



MECHANICAL HIGHLIGHTS

ALL THE TECHNOLOGY YOU NEED. WITHOUT COMPLEXITY.

The Watch delivers advanced environmental monitoring in a simple, intuitive system — from remote & true real-time data and configurable alerts, to smart sensor integration, to reliable operation in the field.

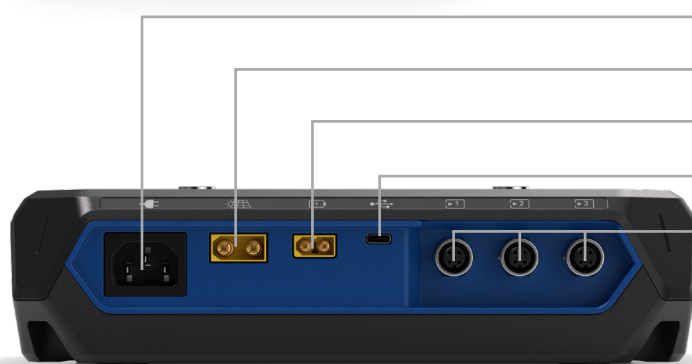


LCD Screen

Power

Start / Stop Button

Functions toggle



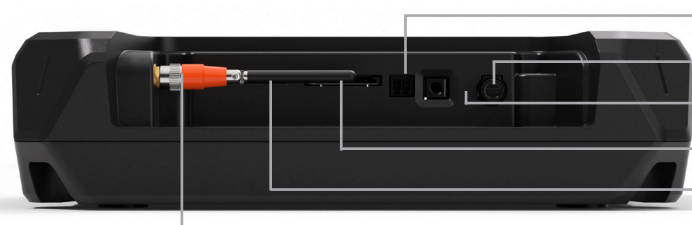
AC Power

Battery

Solar

USBC

Smart Sensors



External Output

Fuse

LFP-AGM Switch

SD Card

SIM Card (+ESIM)

Antenna

TECHNICAL SHEET

CONTROLLER

TECHNICAL SPECIFICATIONS

MEMORY ¹	
On-Board Memory Size ¹	256MB ¹
SD Card	Up to 32GB
INTERVAL RECORDS	
Interval Records Duration	1s to 1h
Interval Records Duration Resolution	1s
Recording Mode	Continuous auto-store
Align on Real-Time Clock	Yes
MONITORING	
Cellular	4G LTE Cat 4 (LTE, HSPA+, WCDMA, GPRS/EDGE)
GPS	Multi-Constellation GNSS
Record Upload	Soft dB Monitoring Web Service
CLOCK	
Real-Time Clock	10 ppm with daily synchronisation on GPS, 4G network or NTP
ENVIRONMENTAL	
Operating Temperature	-20°C to 40°C
Storage Temperature	-30°C to 50°C
POWER	
Power	0.2W ²
Battery Life	Up to 696h (29 days) (using STWA-00009 battery, without solar or power-supply) ³
Battery Chemistry	LFP or AGM
PHYSICAL	
Height	64 mm (2-1/2")
Width	263 mm (10-3/8")
Depth	227mm (8-15/16")
Weight	500g (1.1lbs)
CONNECTORS	
Mains power	IEC 320 C14 Male
Solar Panel	XT90-M connector
Battery	XT60-M connector
USB	USB C
LTE Antenna	SMA Female
RECOMMENDED ACCESSORIES	
STWA-00010	Watch 4 Station Cabinet
STWA-00009	Watch 4 Cabinet Battery (12.8V, LFP, 40.2Ah)
SUPA-00010	Pole-Mount bracket for Watch cabinet (mounting hardware included)
ALIA-00008	100W solar panel
SUPA-00004	Adjustable bracket for 100W solar panel (mounting hardware included)
SUPA-00003	Heavy-Duty Tripod

¹ MEMORY IS UNLIMITED WHEN UPLOADING RECORDS TO SOFT DB WEB MONITORING SERVICE

² WITHOUT SENSORS CONNECTED. REFER TO SENSOR SPEC SHEET FOR SENSOR POWER CONSUMPTION

³ BATTERY LIFE VARIES WITH TEMPERATURE AND CONNECTED SENSORS

TECHNICAL SHEET

VIBRATION COMPONENTS

COMPATIBLE SENSORS	
SVSK-00001	SVS LN Smart Vibration Sensor (8g) ¹
SVSK-00002	SVS XR Smart Vibration Sensor (40g) ¹
SGSK-00001	SGS ISEE Smart Geophone (ISEE, 125mm/s) ²
SGSK-00002	SGS DIN Smart Geophone (DIN, 125mm/s) ²
SGSK-00003	SGS HS1 Smart Geophone (5Hz, 12.5mm/s) ²
SGSK-00004	SGS HS2 Smart Geophone (10Hz, 12.5mm/s) ²
SGSK-00005	SGS ISEE Smart Geophone (ISEE, 125mm/s, Bore-Hole) ³
SGSK-00006	SGS DIN Smart Geophone (DIN, 125mm/s, Bore-Hole) ³
SGSK-00007	SGS 2 Smart Geophone (250mm/s)
SGSK-00008	SGS 2 Smart Geophone (250mm/s, Bore-Hole)

1 REFER TO SVS (SVSK-0000X [1-2]) SPEC SHEET FOR FULL SPECIFICATIONS

2 REFER TO SGS (SGSK-0000X [1-4]) SPEC SHEET FOR FULL SPECIFICATIONS

3 REFER TO SGS BORE-HOLE (SGSK-0000X [5-6]) SPEC SHEET FOR FULL SPECIFICATIONS

VIBRATION TECHNICAL SPECIFICATIONS

INTERVAL RECORDS	SVS ¹	SGS ²⁻³
Data	Peak Velocity Peak Velocity Frequency RMS Velocity RMS max Velocity DIN KBFT Velocity RMS Acceleration RMS max Acceleration Peak Acceleration RMS ISO Wm Acceleration RMS max ISO Wm Acceleration Peak Wm Acceleration Avg. Earth Gravitational Field	Peak Velocity Peak Velocity Frequency RMS Velocity RMS max Velocity RMS 1/3 Oct. Velocity RMS max 1/3 Oct. Velocity Peak 1/3 Oct. Velocity DIN 45669 KBFT Velocity
Memory Maximum Interval Records ⁴	891,594	165,150
EVENTS	SVS ¹	SGS ²⁻³
Data	All data from Interval Records (0.093s data rate)	
Waveform	Acceleration or Velocity (X, Y and Z) (2,756 kHz)	Velocity (X, Y and Z) (2,756 kHz)
Trigger	Peak Acceleration or Velocity or Overpressure	Peak Velocity or Overpressure
Pre-Trig Duration	User defined from 0s to 3s	
Total Duration	User defined from 5s to 30s	
Memory Maximum Events Duration ⁵	1h41m	

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2 REFER TO SGS (SGSK-0000X [1-4]) SPEC SHEET FOR FULL SPECIFICATIONS

3 REFER TO SGS BORE-HOLE (SGSK-0000X [5-6]) SPEC SHEET FOR FULL SPECIFICATIONS

4 MEMORY IS UNLIMITED WHEN UPLOADING RECORDS TO SOFT DB WEB MONITORING SERVICE

TECHNICAL SHEET

SOUND AND OVERPRESSURE

COMPONENTS

COMPATIBLE SENSORS	
SASK-00001	smartAcoustic Sensor with 50 mV/Pa microphone
SASK-00002	smartAcoustic Sensor with 50 mV/Pa microphone with Syscheck
SASK-00003	smartAcoustic Sensor with 12.6 mV/Pa microphone

1 REFER TO SAS (SASK-0000X) SPEC SHEET FOR FULL SPECIFICATIONS

SOUND AND OVERPRESSURE

TECHNICAL SPECIFICATIONS – SOUND

INTERVAL RECORDS	
Data	Leq, SEL, Lpeak (A, C, Z and G) Lmax, Lmin, (Fast or Slow, A, C, Z and G) SPL Percentiles (1%, 2%, 5%, 8%, 10%, 25%, 50%, 90%, 95% and 99%) (Fast or Slow; A, C, Z or G) TaktMaximal (LAFTm5) Spectra (1/3 Octave and FFT)
Memory Maximum Interval Records ²	1,427,224 (without FFT enabled) – 221,427 (with FFT enabled)
EVENTS	
Resolution	12kHz (8-bit or 4-bit adaptive dynamic compression)
Trigger	User defined from 40 to 90 dB SPL (Slow or Fast) (A, C or Z)
Pre-Trig Duration	User defined from 0s to 3s
Total Duration	User defined from 5s to 30s
Memory Maximum Events Duration ²	1h33m (8-bit compression) – 3h06m (4-bit compression)

2 MEMORY IS UNLIMITED WHEN UPLOADING RECORDS TO SOFT DB WEB MONITORING SERVICE

SOUND AND OVERPRESSURE

TECHNICAL SPECIFICATIONS – OVERPRESSURE

INTERVAL RECORDS	
Data	Peak Overpressure Level
Memory Maximum Interval Records	5,940,202
EVENTS	
Data	Peak Overpressure Level
Waveform	3 kHz 8-bit adaptative dynamic compression
Trigger	Vibration level or Peak Overpressure
Pre-Trig Duration	User defined from 0s to 3s
Total Duration	User defined from 5s to 30s
Memory Maximum Events Duration	6h12m

TECHNICAL SHEET

WEATHER COMPONENTS

COMPATIBLE SENSORS

WTHK-00002

SWS Smart Weather Sensor¹

¹ REFER TO SWS (WTHK-00002) SPEC SHEET FOR FULL SPECIFICATIONS

WEATHER TECHNICAL SPECIFICATIONS

INTERVAL RECORDS

Data	Atmospheric Temperature (Min, Max and Avg.) Atmospheric Humidity (Min, Max and Avg.) Barometric Pressure (Min, Max and Avg.) Wind Speed (Min, Max and Avg.) Wind Direction (Min, Max and Avg.) Rain Rate (Min, Max and Avg.)
Memory Maximum Interval Records ¹	2,333,651

¹ MEMORY IS UNLIMITED WHEN UPLOADING RECORDS TO SOFT DB WEB MONITORING SERVICE



30 years
of setting the standard
in acoustics & vibration
Soft dB