

AI INFRASOUND SOURCE LOCATION

QUAKE SERIES by QuakeLogic

★ POWERED BY AI SOFTWARE DEVELOPED BY QUAKELOGIC

AIRSCOPE. Three AIR 2.0 sensors, a QUAKEVAULT EDGE and a 14" touchscreen find where low-frequency noise comes from: bearing and range, on a live AI sonar.



AIRSCOPE · INFRASOUND SOURCE DETECTION KIT

COMPLETE SYSTEM

\$5,999

3 × AIR 2.0 · QUAKEVAULT EDGE · 14" touchscreen · full software · free 6-port switch

EXTRA SENSOR

+\$1,099

Each additional AIR 2.0

OUTPUT

Bearing + range

in feet and meters, with calibrated dB(G) evidence



MANUFACTURED IN USA

from U.S. and imported parts

Designed, Software Development and Manufactured in Roseville, California

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Why AIRSCOPE?

Because low-frequency noise is easy to feel and hard to find. A hum at night, rattling windows, a pressure you sense more than hear. It comes from compressors, HVAC plants, generators, fans, pumps, turbines and heavy traffic, mostly below 20 Hz, where the ear and ordinary sound meters miss it. Without knowing where it comes from, and without proof, nothing gets fixed.

AIRSCOPE ANSWERS THREE QUESTIONS



Where is it coming from?

Bearing and distance to the source, in feet and meters, live on the AI sonar.



How strong is it, and when?

Calibrated dB(G) levels every second, with 24-hour and 7-day patterns.



Can I prove it?

Time-stamped records and reports you can hand to a landlord, HOA, operator or authority.

WHO IT IS FOR

Homeowners and HOAs

Building and facility managers

Industrial sites and utilities

Wind and energy operators

Acoustic consultants

Local authorities

THE USUAL WAY

WITH AIRSCOPE

Finding the source

Walking around at night, guessing

Bearing and range on a live AI sonar

Evidence

Phone recordings and notes

Calibrated dB(G) records to ISO 7196, time-stamped

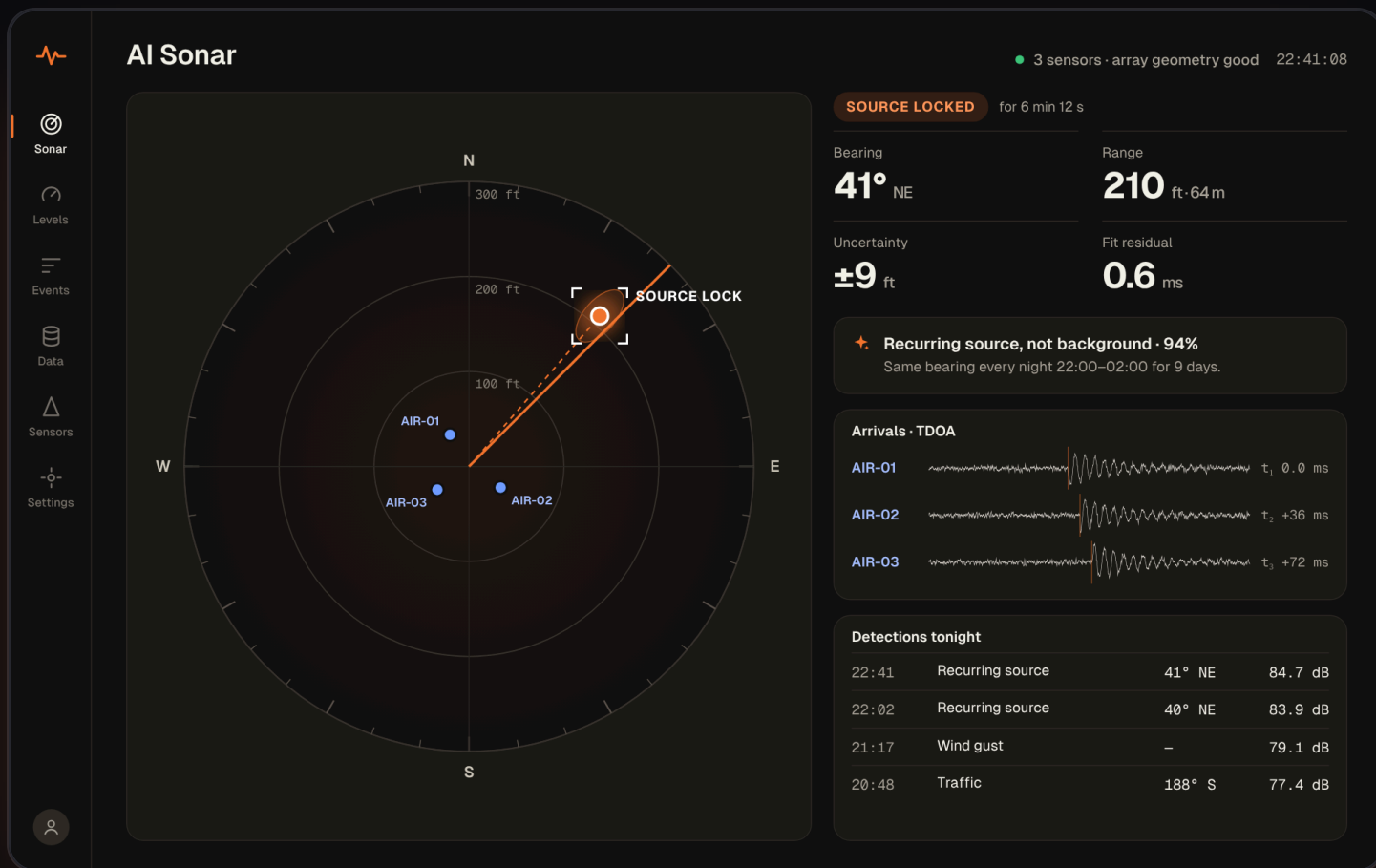
Setup

A specialist and a laptop full of tools

Turnkey. Plug in and it finds its own sensors

Find where it comes from.

The AI sonar fuses arrivals from all three AIR 2.0 sensors into one live source estimate: direction, distance and how sure it is.



Bearing and range

Time-difference-of-arrival across the array gives direction and distance in feet and meters.



Confidence, not a guess

Source lock, fit residuals, array geometry and modeled uncertainty on screen.

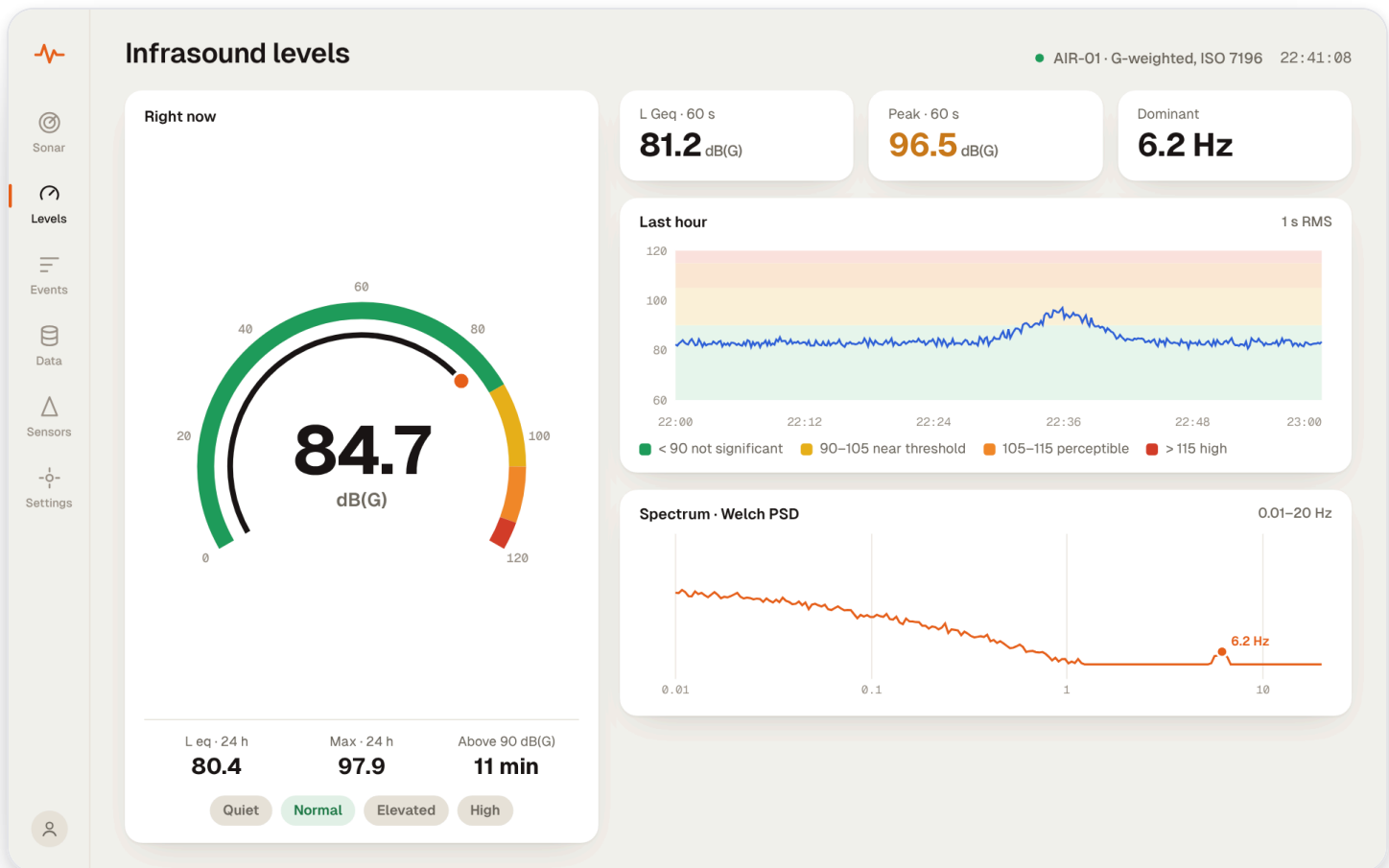


Recurring or background

Machine learning separates a real repeating source from wind and traffic.

Measure it. Keep the record.

Calibrated infrasound levels, G-weighted to ISO 7196 and referenced to 20 μ Pa, recorded every second and archived for good.



Calibrated analytics

RMS, peak, equivalent levels, percentiles, dominant frequency and duration.



Patterns over time

Automatic 24-hour heliplots and a 7-day spectrogram make a nightly source plain to see.

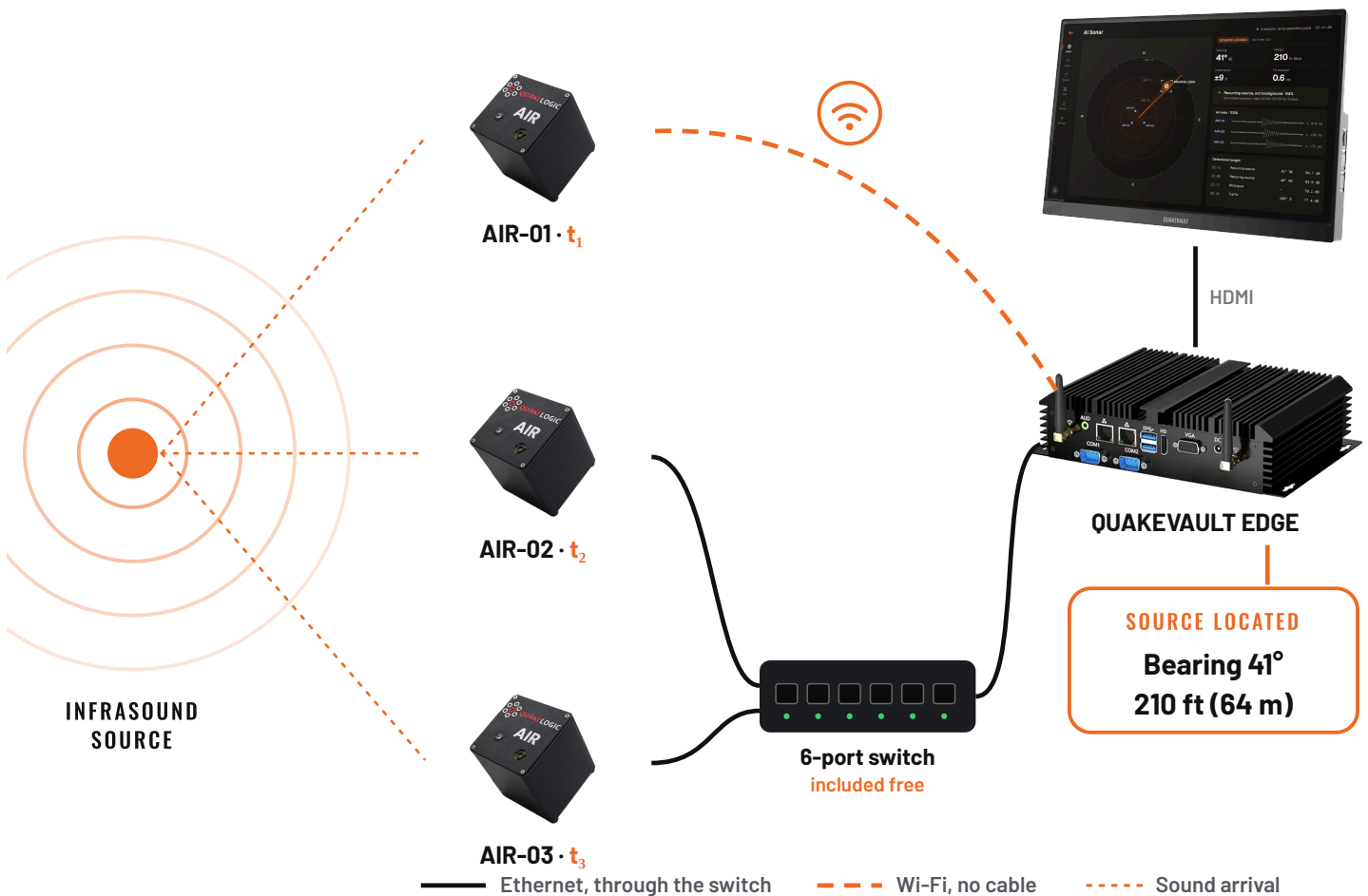


Reports and alerts

dB(G) reports in PDF, CSV and JSON; alerts by email, SMS, Telegram and in the browser.

How it works.

The source reaches each AIR 2.0 at a slightly different moment. QUAKEVAULT EDGE turns those differences into a direction and a distance. Each sensor connects by Wi-Fi or by cable through the free switch, in any mix.



Turnkey. Plug and play.



QUAKEVAULT EDGE detects every AIR 2.0 on the network by itself and registers it. No IP addresses, no configuration, no software to install.

1

Plug in

Place the sensors around the site and power them up. Wi-Fi, or a cable to the switch.

2

Found automatically

The EDGE finds each AIR 2.0, names it and starts recording within seconds.

3

Locate and classify

The EDGE solves the time differences, AI checks the source is real, the touchscreen shows it.

QUAKEVAULT EDGE.

The brain of AIRSCOPE. A fanless industrial server, the same hardware as the Quake Series QUAKEVAULT, that runs the full software and AI on site, with no cloud and no subscription.



Intel Core i5

2 cores / 4 threads, up to 2.6 GHz

16 GB

DDR3L memory

512 GB SSD

months of continuous data

Fanless

silent, -15 to +60 °C

1



2 × Gigabit Ethernet

One port to the sensor switch, one to your office network or internet.

2



2 × RS-232 (COM1, COM2)

Serial instruments, GPS clocks and PLCs.

3



4 × USB 3.0, 2 × USB 2.0

Touch input, keyboard, fast export to drives, 4G LTE modem.

4



HDMI

Drives the 14" touchscreen in full 1920 × 1200.

5



VGA

A second display for a control room or an older monitor.

6



Dual-band Wi-Fi

Talks to AIR 2.0 sensors without cables and gives a backup link.

7



12 VDC input

Mains, battery, solar or UPS. Restarts by itself after a power cut.

8



Audio out

A local alarm tone or a speaker in the room.



Bluetooth

Wireless keyboard, mouse and nearby accessories.



GPS antenna (included)

Precise time for every sample and an NTP server for the sensors.

AIR 2.0.

QuakeLogic's own high-precision infrasound sensor. Three of them form the AIRSCOPE array; add more for larger sites at \$1,099 each.



24-bit

low-noise digitizer

0.01–20 Hz

infrasound band

Wi-Fi + Ethernet

both built in

1.75 W

IP54, 410 g, Made in USA



24-bit, low noise

Delta-Sigma digitizer (Cirrus Logic CS5532), 21 effective bits at 100 SPS.



Sensitive to faint signals

High-sensitivity differential pressure element, 0.01–20 Hz.



Wi-Fi and Ethernet

Both built in. Use either one, on any sensor.



Plug and play

Found and registered by QUAKEVAULT EDGE automatically.



On-board processing

Embedded web page and on-board data processing on every unit.



Built for the field

IP54 enclosure, 410 g, 1.75 W. Made in USA.

Sensor	Differential pressure infrasound	Band	0.01–20 Hz (configurable)
ADC	24-bit Delta-Sigma, CS5532	Resolution	21 effective bits @ 100 SPS
Sample rates	50 / 100 / 200 SPS	Gain	2, 4, 8, 16, 32, 64
Clip level	±8,388,608 counts	Filters	Low-pass, high-pass, inverse; polarity correction
Network	Wi-Fi 802.11 b/g/n and 10/100 Ethernet	Timing	NTP
Power	12 V / 2.1 A DC or 5 V GPIO; 1.75 W	Size, weight	100 × 100 × 107 mm, 410 g

Everything in one kit.



Infrasound sensors	3 × QuakeLogic AIR 2.0, high-precision
Sensor digitizer	24-bit Delta-Sigma, Cirrus Logic CS5532
Sensor connectivity	Wi-Fi and Ethernet on every AIR 2.0, plug and play
Edge appliance	1 × QUAKEVAULT EDGE, fanless, auto-detects sensors
Display	14" touchscreen, 1920 × 1200, with kickstand
Software	Full QuakeVault software, included
Network switch	6-port Ethernet switch, complimentary
Source localization	Multi-sensor TDOA, AI sonar display
Acquisition	Earthworm / SeedLink workflows
Data archive	Permanent, time-indexed MiniSEED

OPTIONS



Additional AIR 2.0 · \$1,099

Grow the array for better geometry and accuracy over larger sites or several buildings.



Remote access and VPN

Monitor the EDGE and the array securely from off site.



Extended data retention

More storage for longer continuous MiniSEED archives.

Tech specs

Kit contents	3 × AIR 2.0, EDGE, 14" display	EDGE processor	Intel Core i5, 2C/4T, up to 2.6 GHz
Sensor type	Differential pressure infrasound	EDGE memory	16 GB DDR3L
Sensor ADC	Delta-Sigma, 24-bit, CS5532	EDGE storage	512 GB SSD
Resolution	21 effective bits @ 100 SPS	EDGE networking	2 × Gigabit LAN, dual-band Wi-Fi, Bluetooth
Clip level	±8,388,608 counts @ 24-bit	EDGE interfaces	4 × USB 3.0, 2 × USB 2.0, HDMI, VGA, 2 × RS-232
Sample rates	50 / 100 / 200 SPS	EDGE cooling	Fanless
Selectable gain	2, 4, 8, 16, 32, 64	EDGE operating temp.	-15 to +60 °C (+5 to +140 °F)
Digital filters	Low-pass, high-pass, inverse	Infrasound band	0.01–20 Hz (configurable)
Display	14" IPS touch, 1920 × 1200	dB reference	20 µPa (ISO 7196 dB(G))
Sensor timing	NTP	Source localization	Multi-sensor TDOA + uncertainty
Sensor connectivity	Wi-Fi and 10/100 Ethernet	AI analytics	Event classification, arrival estimation
Sensor enclosure	IP54, 410 g (0.9 lb) each	Plots	Waveform, FFT, PSD, octave, sonar
Sensor size	100 × 100 × 107 mm (3.9 × 3.9 × 4.2 in)	Data archive	Permanent MiniSEED; SeedLink server
Sensor power	12 V / 2.1 A DC or 5 V GPIO; 1.75 W	Software compatibility	Earthworm, WinSDR, ObsPy, Swarm
Country of origin	Made in USA	Exports / API	CSV, XLSX, JSON, MiniSEED, PNG, PDF; REST API

AIRSCOPE SYSTEM

\$5,999

3 × AIR 2.0 · EDGE · 14" touchscreen

ADDITIONAL AIR 2.0

\$1,099

each, Wi-Fi + Ethernet

In the box

3 × AIR 2.0 · QUAKEVAULT EDGE · 14" touchscreen with kickstand · power supplies · full software with AI sonar, levels, reports and alerts. Plug and play.

Free 6-port Ethernet switch.

COMMERCIAL TERMS

USD, **EXW Roseville, California** (Incoterms[®] 2020). Freight, duties and taxes excluded. Prices effective 25 October 2026, subject to change.

SUPPORT

12-month warranty. Configured and tested in Roseville, California, under ISO 9001:2015. Remote commissioning and support from the USA.

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Find the source.

Order or book a live demo: sales@quakellogic.net · +1 (916) 899-0391

Scan for the product page · products.quakellogic.net/product/airscope

