

xAlarm

DIGITAL ALARMING UNIT

From Event to Action—Automatically
Distributed, real-time alarming that turns triggers into sirens, lights, gates, and instant notifications across your SHM network.

Why xAlarm

- Distributed responses: deploy multiple units to act at different points of the site.
- Relays + messaging: switch local devices and notify teams via SMS/email—simultaneously.
- Maps to your triggers: Leveling, STA/LTA, Above/Below, Relative thresholds, and OMA-based events.
- Voyager-native: configure, test, and log everything from the same workspace.
- Rugged + synced: IP67 aluminum, GPS/DigiSync® timing, low power, PoE-friendly.

What makes it different

- Scalable outputs: 4 onboard relays (NO/NC), expandable to 10 via external box.
- Serious notifications: integrated GSM modem, up to 10 SMS recipients; email + event logs.
- Trigger logic you already use: ties directly to Voyager trigger types and calculated PGA/PGV/PGD.
- Any topology: Ethernet standard; optional Wi-Fi, DigiMESH®, or GSM/4G.

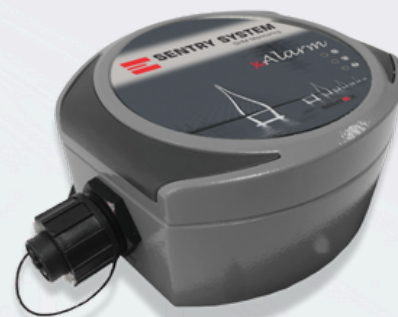
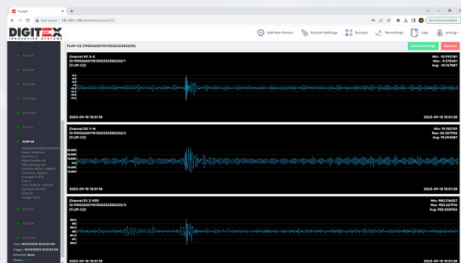
Made for

Earthquake early warning •
Tunnels/bridges automation (barriers, lights, lifts) • Dams and transport hubs •
Wind farms/industrial plants • Multi-site SHM programs needing coordinated actions.

CE • ISO • Calibration certificate

How xAlarm fits your SHM

- Local action, central control: Voyager decides; xAlarm executes where it matters—sirens, gates, beacons.
- Coordinate many points: chain several xAlarm units across spans, portals, and approaches for scenario-based responses.
- Stay aligned: GPS/DigiSync® timestamps for accurate cross-asset event correlation.



Configure your unit

Comms: Ethernet (10/100); optional Wi-Fi, DigiMESH®, 4G.
Outputs: 4 NO/NC relays, expandable to 10; mapped in Voyager.
Notifications: SMS (up to 10 recipients) and email logging.
Triggers: Levelling, STA/LTA, Above/Below, Relative, OMA-based.
Timing: GPS or DigiSync® (sub-µs/sub-ms).
Power: 9–28 V DC, PoE-ready; optional battery & surge protection.
Options: Battery pack, PoE injector, 6-relay expansion, Wi-Fi/GPS/4G.

Outcome snapshot

- Seconds count: automatic, repeatable actions the moment thresholds are crossed.
- Multi-channel assurance: relays + SMS + email + logs.
- Fewer false trips: align to Voyager's proven trigger logic and calculated metrics.

Result: Faster, coordinated responses and safer operations—with alarms you can trust.

Your workflow with Digitex

- **Instrument:** mount xAlarm; wire relays to sirens/lights/gates; insert SIM.
- **Configure:** in Voyager, map each output to your triggers; set SMS/email lists and durations.
- **Verify:** run test events; confirm relay switching and message delivery.
- **Operate:** alarms fire automatically; distributed units coordinate actions across the site.
- **Scale:** add more xAlarm nodes as your monitoring footprint grows.

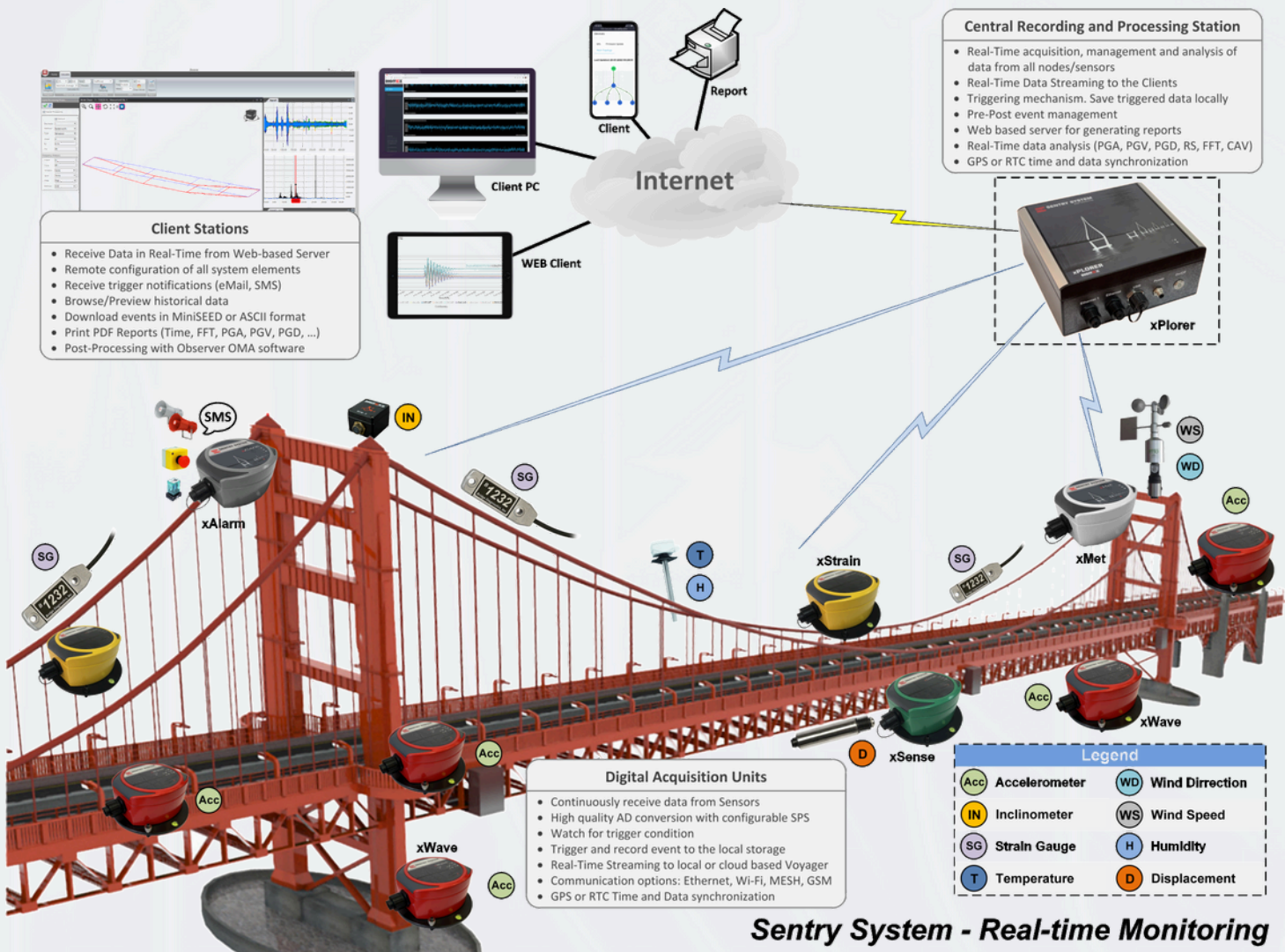
DISTRIBUTED SYSTEM OVERVIEW

xDAS® is Digitex Systems' distributed Structural Health Monitoring (SHM) solution, designed to instrument large and complex structures with networks of intelligent sensors. By combining multiple digital acquisition units, xDAS provides a scalable, modular, and reliable way to capture the dynamic response of structures in real time. From bridges and dams to skyscrapers, tunnels, pipelines, and industrial facilities, xDAS delivers the 'pulse' of any structure continuously, enabling operators to assess safety and performance instantly.

The system integrates seamlessly with Digitex's Voyager® software running on xPlorer® or in the cloud, providing centralized acquisition, storage, and analysis. Each xDAS node digitizes sensor data directly at the source, ensuring noise-free transmission over Ethernet, Wi-Fi, DigiMESH®, or low-cost CAT5 cabling. The modular architecture allows hundreds of units to be combined in daisy-chain or star topologies, making it ideal for projects of any scale.

DISTRIBUTED SYSTEM MEMBERS

The Distributed Sentry System family of products consists of several units that can be installed as standalone devices or as part of a complete SHM deployment: **xPlorer** – Central Acquisition and Processing Unit, **xWave** – Digital Accelerometer Unit, **xSense** – Voltage Sensor Digitizer Unit, **xStrain** – Bridge Sensor Digitizer Unit, **xGeo** – Digital Geophone Unit, **xInc** – Digital Inclinator Unit, **xMet** – Weather Station Gateway, **xAlarm** – Digital Alarming Unit.



ABOUT DIGITEX

Digitex is a company specialized in design and development of real structural health monitoring systems for a variety of industries and applications including: bridges, tall buildings, campuses, windmills, oil rigs and more. Digitex's innovative solution for ambient vibration measurements and quick health assessment of structures is jointly developed and validated with our partners and advisors from the Universities. When properly configured, the Digitex system is capable of measuring and responding to both natural and man-made events such as: earthquakes, wind, explosions and accidental heavy impacts.