

xPlorer Premium

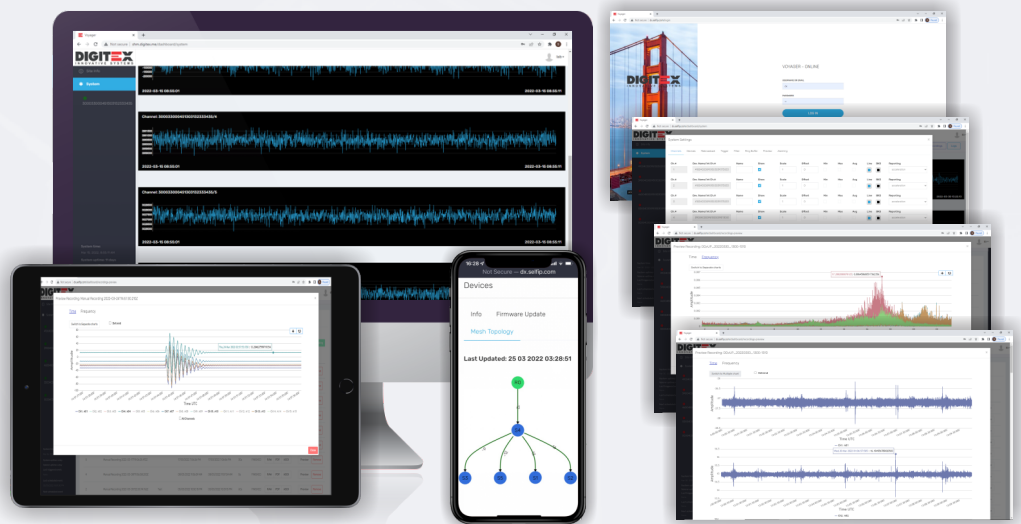
Central Acquisition & Processing Station

xPlorer Premium

- Up to 60 days local storage
- Integrated Voyager® software
- GPS/DigiSync® synchronization
- Industrial IP67 design

Overview

xPlorer® is the central station of the Sentry System – providing reliable, real-time acquisition, management, and analysis of structural monitoring data. Designed for permanent installations, xPlorer combines robust industrial hardware with the powerful Voyager® software suite. With multiple communication options, integrated time synchronization, and secure local storage, xPlorer ensures uninterrupted operation even in the harshest environments.



*“The Core of Distributed
SHM – Reliable, Real-Time
Data Acquisition and
Processing”*

Key Features

- Permanent & Reliable – Industrial-grade enclosure, IP66/IP67 protection, embedded UPS (20h autonomy)
- Advanced Acquisition – Supports up to 254 units, flexible triggering (Leveling, STA/LTA, Above/Below thresholds, OMA agent)
- Seamless Software Integration – Voyager® Data Management Suite included for acquisition, reporting, and analysis
- Robust Data Handling – Continuous ring buffer recording (up to 60 days), Store&Forward®, MiniSEED compatibility
- Flexible Communications – Dual Ethernet ports, Wi-Fi, DigiMESH®, optional GSM/4G
- Accurate Timekeeping – GPS or DigiSync® protocol for precise system-wide synchronization
- User Friendly – Web interface for configuration, reports, remote management & OTA updates
- Smart Alarming – Relay outputs, SMS/email notifications, integration with xAlarm

Benefits

- Guarantees zero data loss even in network outages
- Reduces installation cost with wireless DigiMESH® options
- Provides global synchronization across all sensors
- Ensures fast reporting with automated PDF/CSV outputs
- Offers scalable architecture – expandable as your project grows



Technical Specifications

Environmental	Operating: -20°C to +55°C, 90% RH non-condensing
Physical	Rugged aluminum enclosure, IP66/IP67; Weight: 0.7 kg; Dimensions: 130 × 120 × 65 mm
Power	Input: 110/220 VAC; Backup: 12V external battery; Consumption: 5–10 W; Integrated UPS (20h autonomy)
Data Handling	Ring buffer (up to 60 days); Triggered, scheduled, manual recording; Compression: DigiWLC & MiniSEED
Synchronization	GPS, DigiSync®, RTC
Connectivity	2 × Ethernet, Wi-Fi, DigiMESH®, optional GSM/4G; FTP & SeedLink servers
User Interface	Informational LEDs; Web app panel
Outputs	Configurable relays (NO/NC); Email/SMS notifications
Software	Comes pre-installed with Voyager, providing full data acquisition, management, triggering, analysis, and reporting.
Integration	Works seamlessly with Nexus SeedLink client, Vista data viewer, and Observer OMA analysis suite.

Applications

- Long-term monitoring of bridges, dams, tunnels, pipelines, tall buildings
- Earthquake early warning and structural response monitoring
- Rapid post-event safety assessment
- Mining and industrial asset vibration monitoring

About Digitex

Digitex Systems provides advanced Structural Health Monitoring (SHM) solutions for civil infrastructure worldwide. Our portfolio includes cutting-edge sensors, acquisition systems, and analysis software tailored to deliver real-time, actionable insights. Learn more at www.digitexsystems.com.

*“The heart of every
Digitex Sentry System
installation.”*



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