

xPlorer Ambient

Portable Recording and Processing Station



xPlorer Ambient

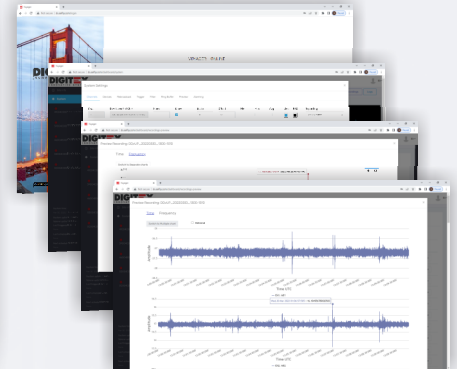
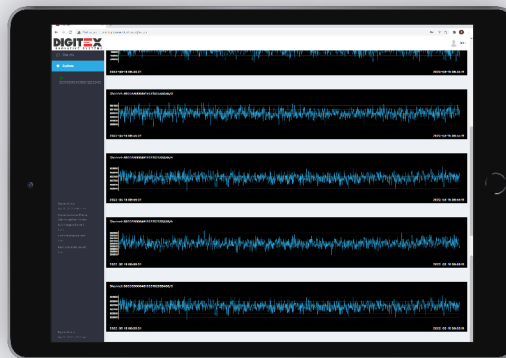
Key Features:

- Rugged enclosure
- Web based server for generating reports
- Data archiving (triggered, scheduled or buffered)
- Real-Time data streaming to the web clients
- Triggering mechanism
- Pre-Post event management
- Data compression for reduced bandwidth
- Ethernet/Wi-Fi communication protocols
- GSM connectivity
- Low power consumption
- GPS time and data synchronization
- Can provide Power Charging for all nodes
- Internal battery for 24 hours operation

Overview

xPlorer Ambient provides Real-Time processing, recording, management and analyzes of data from all units in a xDAS Ambient Vibration Measurement System. It offers an affordable and flexible solution for field acquisition and structural data analysis. It is designed for field measurements in harsh environments. Size, weight, and cabling are critical design requirements in almost any field measurement. Variety of international safety, electromagnetic compatibility (EMC), and environmental certifications and ratings are all available with xPlorer Ambient. xPlorer Ambient is powered by battery that can offer more than 24 hours continuous measurement.

The web-based measurement system xPlorer Ambient is the hub of our product package and takes care of all data collection, communication, processing, monitoring and storage of measurement data. Here you can also set trigger settings and alerts that automatically send an e-mail or SMS to those responsible if a measurement exceeds permitted limits or if a failure occurs. With the xPlorer you can operate the xDAS AVM system remotely and keep an eye on your measurement data in real time, wherever you are.



Features	
Sampling Rate	User adjustable
Synchronization	RTC, GPS, System Clock
Automated PDF	FFT, PA, PV, PD, AVG, His.
Rebroadcast	Multiple Users
Trigger	Configurable, Voting M.
Recordings	Trigger, Schedule, Buffer
Filter	5 Filter Topologies
Notifications	email, SMS
Device Config	Add/Edit/Remove
Charger	For Up to 6 xDAS Units
Units Connected	Up to 254
Network	5 Ethernet, 2.4Ghz, 5GHz

Power	
Powering	110/220VAC
Battery Backup	Internal Battery, 12V
Power Cons.	5-10W
Power for units	Embedded Charger

Physical	
Packaging	Rugged Copolymer
Protection	Watertight, Crushproof
Weight	9.1Kg
Dimensions	406x335x174mm

User Interface	
Informational LED	
System Configuration Panel	
Web Application Panel	

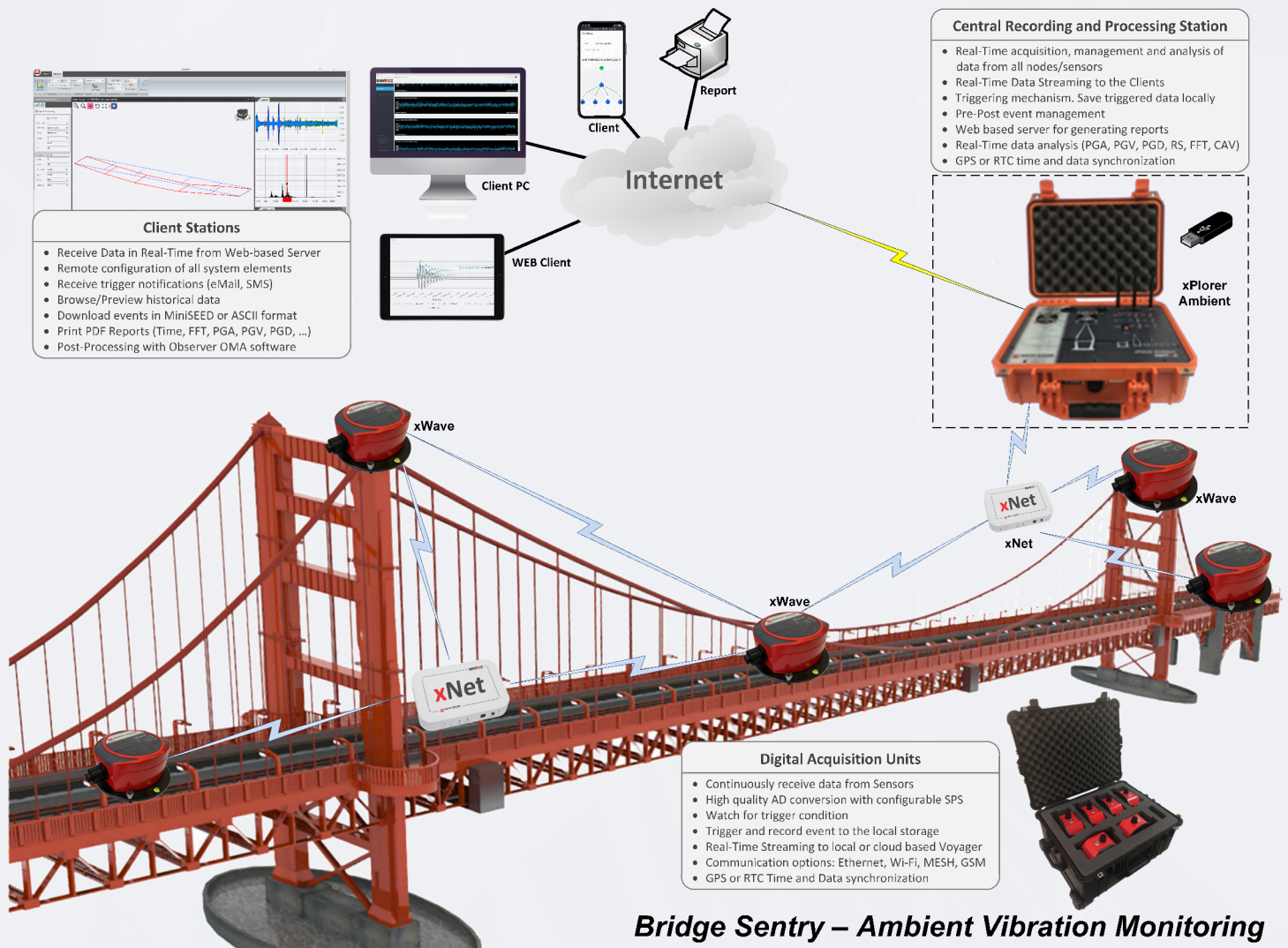
Environmental	
Operating Temp.	-20°C to 55°C
Humidity	90% non-condensing



Real Time Ambient Vibration Measurement System Architecture

The Digitex xDAS AVM System is a fully portable battery-operated equipment that measures data from vibrations surrounding the structure. Measurement data is automatically transmitted over the local wireless network to your PC, tablet or smartphone. The Digitex xDAS AVM System also offers an option for extending the wireless network coverage in harsh and noisy environments.

The Digitex xDAS AVM System is designed to work unattended around the clock, without external power sources, for an extended period of time in demanding outdoor environments. In the field, measurements are started and stopped with one push of a button. Place the sensors at the designated measurement points, start the measurement and leave the battery-operated instrument for the duration of the field test. Initial test results are obtained very easy in form of an automated PDF report that can be seen on the laptop or smartphone. A very energy efficient design provides up to 24h of battery operation, which together with the simple handling provides for superior project economy.



Bridge Sentry – Ambient Vibration Monitoring

About Digitex

Digitex is a company specialized in design and development of real time 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.

Rev 03/22