Advanced Automation System

AUTOSYS

Seismic Data Recording System

Seismic Data Recorder : VS-24150
Accelerometer : VL-3120

(주) 오 토 시 스
www.autosys.co.kr

Introduction

Seismic data recorder manufactured by Autosys is a high precision seismic equipment. It measures the micro-seismic about 10nano-g rms and structural vibration signal. It is a system that records and analyzes the seismic signals synchronized to GPS clock. The system uses the cutting edge digital signal processing technologies, internet communication and GPS technologies. It has 3~9 signal channels that measure, save and transmit the broadband seismic signals. A built-in A/D converter is capable of 24bits. It does sampling the signal wave form by GPS time or TCXO Clock.

The power supply synchronizes with sensor calibration automatically. Also, the whole sampling data is saved in the internal memory and transmitted in real time, at the same time. Sview program installed in monitoring PC sets up each parameter for VS-24150. Then, the whole measured data is monitored by Sview in real time and saved in the PC Memory. VS-24150 Communication uses data forms and compression algorithms in accordance with International Standards & Specifications.

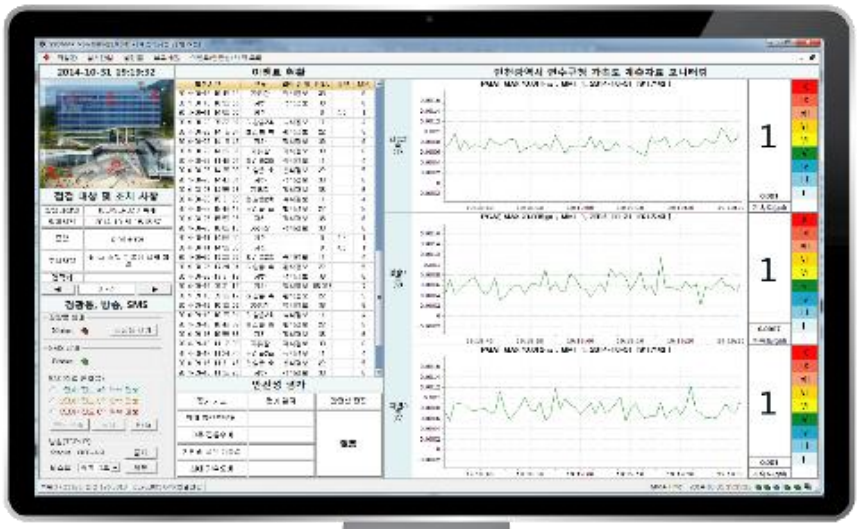
Purposes

- Broadband seismic signal records
- Monitoring the Free field and structure
- Surveillance of nuclear reactor and power generating station
- Vibration Monitoring at the bridge, tunnel and railway
- Structural Vibration Monitoring at the dam and port
- Ground structural Vibration Monitoring at the gas pipe and oil pipeline
- Facilities vibration monitoring (semiconductor, super-precision production)
- Seismic wave measuring for the oil and gas exploration

#1510, 24, Gasan digital 2-ro,
Geumcheon-gu, Seoul, Republic of Korea

AUTOSYS
www.autosys.co.kr

Tel : 82-2-855-8877 Fax : 82-2-851-3120
E-mail : info@autosys.co.kr



Sview-3.0

Internet network

GPS

Earthquake Monitoring System

External Government

HUB

Seismic Data Recorder

Accelerometer (Top / Middle / Bottom Floor)

Alarm Light

SMS Alarm (Optional)

Alarm Broadcasting (Optional)

Broadcasting System

Master Control Room

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System Technical Specifications

Seismic Data Recorder : VS-24150

- CPU:32bit EmbededProcessor with FPGA
- A/DConverter :24bit(100KS/s,100Ksampling/sec)
- Threshold, sta/lta(optional): 137dB@40hz
- Operation : STA/LTA,Threshold
- InputChannel:3Channel/ 6Channel/ 9Channel
- Input Range :±20V
- Network:RS232,RS422,RS485,UDP,TCP/IP
- SamplingClock:Synchronized with GPS-1PPS
- Sampling:2KHz,200Hz,100Hz,50Hz,20Hz,10Hz,5Hz
- TriggerLevel:0.000001gal~2000gal
- Size :320(W)×300(D) ×94(H) mm

Seismic Sensor : VL-3120

- Axis:3axis–Horizontal2axis(N-S,E-W),Vertical1axis(U-D)
- Acceleration Range :±2G
- Frequency Response : DC ~ 200Hz(±3dB)
- Sensitivity :2.4V/G Differential Output
- Dynamic Range : 127dB@40hz
- Input Power :DC +12V
- Operating Temperature : -25~ 70℃
- Shock Vibration :2000G (per 1 ms)
- Size : 127×81×57mm
- Weight :1.1 Kg

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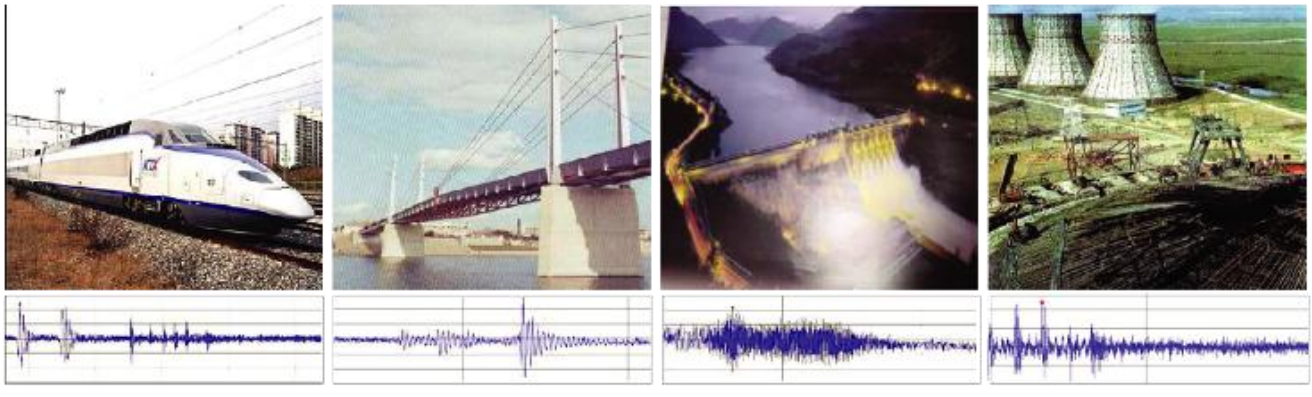
PC Analysis Program : Sview-3.0

- PC Based DataAnalysis
- O/S : Window 2000, WindowXP
- Real TimeData Acquisition
  - 200, 100, 20, 1Sample Continuous Acquisition
  - Trigger DataAcquisition
- Remote ParameterSettings
  - NetworkParameters
  - ChannelParameters
  - CalendarTime
  - TriggerParameters
- Data AnalysisFunctions
  - FFT(FastFourierTransform)
  - Time Data AutoReplay
  - Mini Seed DataViewer
  - Support of Excel CSVFile



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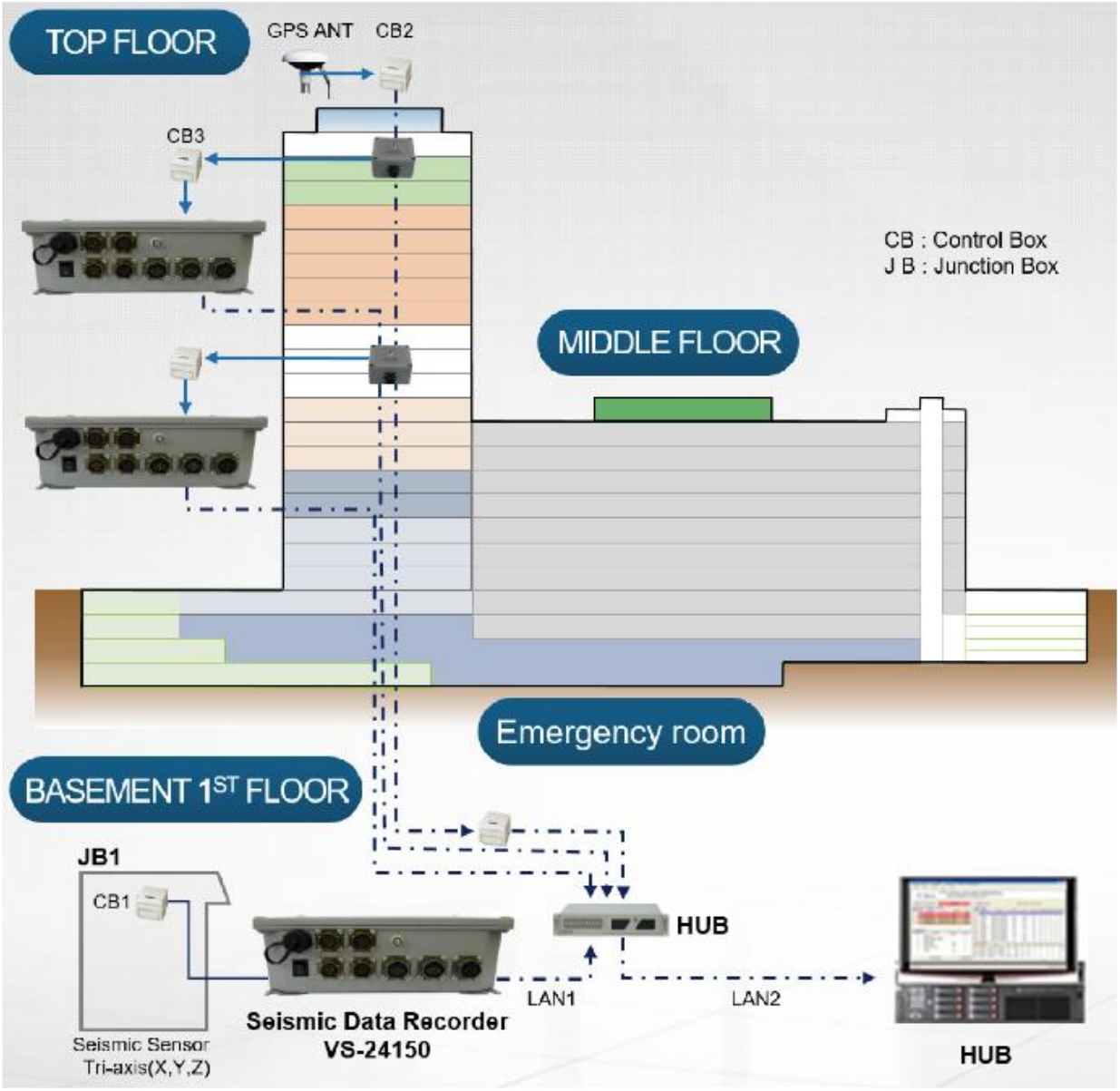
System Technical Specifications

Installation-Plans of High-rise Building (10 stories or higher)



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VS-24150

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