The CUSP-Me represents the next generation of structural monitoring equipment, providing engineers and building and infrastructure managers with the most comprehensive and cost effective real-time monitoring solution available

CANTERBURY SEISMIC INSTRUMENTS

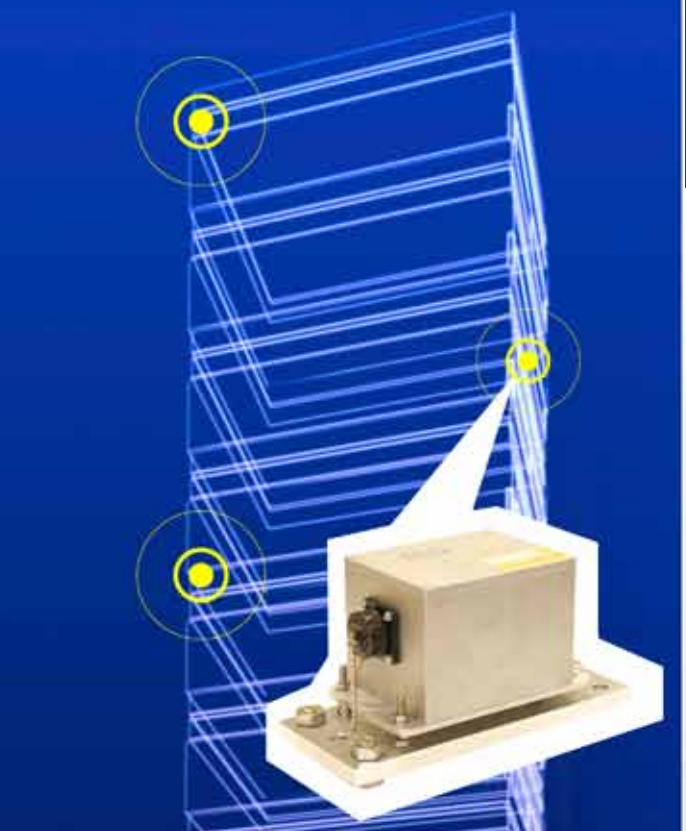
CUSP-M Multichannel Structural Monitoring System

APPLICATIONS

- Structural monitoring
- Design verification
- Instant peak acceleration levels at measuring points throughout structure
- Dense free-filed arrays
- Construction monitoring

FEATURES

- Up to 32 sensors, each 1-9 channels
- Acceleration, weather, strain, displacement measurement
- Large storage capacity
- Flexible communications
- Low deployment and operation costs
- Ruggardised format option



MULTIPLE PARAMETERS CAN BE MEASURED

Including, but not limited to; acceleration, displacement (string wire, laser, LVDT), strain, pore pressure, wind, environment (T.P.H.), water depth etc.

LOW COST STANDARDISED WIRING SOLUTION

The CUSP-Me is deployed with single CAT5 cables between recorder and sensors, providing data communications, timing and power.

EASY INSTALLATION

Sensor data is converted to a digital format at each sensor, and transferred using the Ethernet protocol – in many cases existing Ethernet cabling can be used.

Data timing uses IEEE1588 (PTP) to provide precise synchonisation at each node without GPS.

The central recorder is avaliable in a ruggardised format with an integrated Power-over-Ethernet switch and backup power, or can be supplied for integration into an existing PoE networking environment.

SIMPLE REMOTE ACCESS TO DATA

A central recorder collects synchronised data from multiple sensors and provides a single data set including reporting on event statistics
Access and control is performed over the Internet using a standard web browser

INTEROPERABILITY

All CSI products use open industry standards and require no special software to view, stream, interpret or control the data gathering process.

CANTERBURY SEISMIC INSTRUMENTS LTD
149 Rutherford Building
University of Canterbury
Christchurch 8140,
New Zealand
P. +64 3 364 3575
sales@csi.net.nz

WWW.CSI.NET.NZ

CANTERBURY SEISMIC INSTRUMENTS

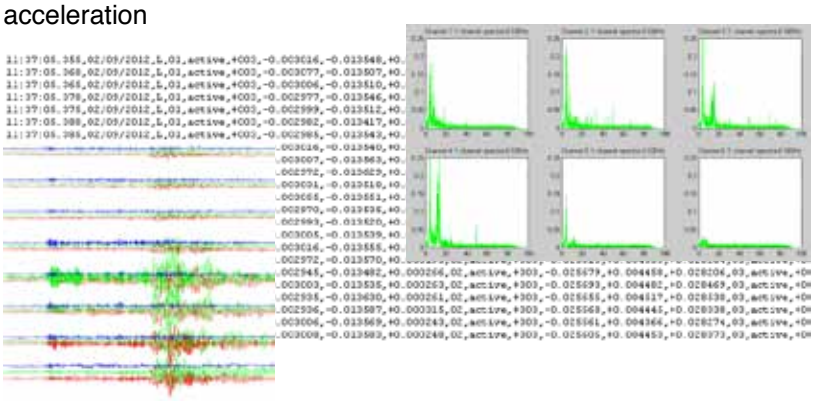
INSTANT REPORTS

Event information alerts via email or SMS to managers and site engineers for immediate decisions on occupancy, integrity and management.

```
CSI SHM instrument 'civic' recorded an event at 03:56:41 27/08/2012 UTC


PA    1.23mg at 'Plant room 0a ' (ch 01) (x=   0.58mg y=   0.65mg z=   1.23mg)
PA    5.82mg at 'Comms room 112' (ch 02) (x=   4.55mg y=   3.45mg z=   3.48mg)
PA    1.49mg at 'Comms room 153' (ch 03) (x=   1.02mg y=   1.01mg z=   0.88mg)
PA    4.44mg at 'Comms room 421' (ch 04) (x=   1.11mg y=   1.10mg z=   4.32mg)
PA    0.01mg at 'Comms room 441' (ch 05) (x=   0.00mg y=   0.00mg z=   0.01mg)
PA    1.98mg at 'Comms room 632' (ch 06) (x=   0.37mg y=   1.26mg z=   1.92mg)
PA    0.01mg at 'Comms room 681' (ch 07) (x=   0.00mg y=   0.00mg z=   0.01mg)

The event filename is civic-2012-08-27_03-56-41
The record is compressed to 763507 bytes length

The event header file is avaliable at
  http://        ?file=civic-2012-08-27_03-56-41.xml

The event data file is avaliable at
  http://        ile=civic-2012-08-27_03-56-41.csv.gz
```

DETAILED DATA

The CUSP-Me provides a comprehensive measurement suite, giving building or infrastructure managers a detailed record of all the parameters determining the structures health, more than just acceleration



PROVEN RESULTS

The CUSP-Me has been proven in numerous airports, civic structures, bridges and tunnels globally, and has demonstrated significant benefits in risk management.