

Epson products used in the Shiojiri test system

1. Accelerometer measurement system for bridge monitoring

Components	Description
Accelerometer (M-A550AR)	Resolution: $\pm 10\mu\text{G}$ (typ.) Totally protected against dust and against the effect of immersion in liquid between 15 cm and 1 m (IP67). Equipped with RS422 digital interface.
Controller	SD card-based data logging, FFT analysis function, built-in wireless data communication interface
Solar power supply unit	10 W solar panel, built-in 12 V / 10 Ah lead-acid battery and charge controller

The accelerometer-based sensing system runs continuously on a solar battery. The accelerometers continuously monitor and capture accurate data on the state of bridges. Data is automatical

2. Inclinator measurement system for hillside monitoring

Components	Description
Inclinometer (M-A550TR)	Resolution: 0.0001deg (typ.) Totally protected against dust and against the effect of immersion in liquid between 15 cm and 1 m (IP67). Equipped with RS422 digital interface.
Controller	SD card-based data logging, FFT analysis function, built-in wireless data communication interface
Solar power supply unit	10 W solar panel, built-in 12 V / 10 Ah lead-acid battery and charge controller

Click here more information on Epson's sensing system products.
(http://www5.epsondevice.com/en/sensing_system/)

About the ICT-based urban planning and monitoring project

Information and communication technology-based urban planning and monitoring is seen as a promising approach to solving a variety of issues facing local communities that are looking to rebuild, revitalize, and increase their resilience given the lessons from the devastating earthquake and tsunami that struck eastern Japan in 2011.

The ICT-based urban monitoring project in Shiojiri was part of a project overseen by the Japanese Ministry of International Affairs and Communications to construct a model for "smart towns" that employ ICT.