

## SenseNet Base Station

- Allows for connection of up to 32 nodes
- GPS support for accurate time stamping
- Connects to host via either 10/100 Ethernet, RS-232 or USB
- Simple installation

### Use this uniquely high quality instrument in applications like:

**Seismic recording – Site Response Analysis - Natural Input Modal Testing - Operational Modal Testing - Vibration Level Testing - Civil Engineering Structural Monitoring**

The SenseNet Base Station is a general purpose base station for SenseNet Sensor Nodes used in seismic applications and measurements on medium size and large structures providing the user with accurate time synchronization between sensor nodes and a high degree of control.

**Additional information.** The SenseNet Base Station serves as a hub for all communication to and from SenseNet nodes along with GPS handling and time stamping of data and communication of measurement and status information to the client. The base station uses primarily GPS time for time synchronization, however it is also equipped with an internal clock, which ensures that all sensors connected to the base remains synchronized even in the absence of a GPS signal. A typical measurement setup is depicted below.

The sensor element provides a signal that is proportional to velocity. This signal is integrated and differentiated to obtain displacement and acceleration. The sensor elements are individually calibrated and digitally corrected for phase and amplitude errors. Time synchronization is done through the common data interface connection. The low noise floor of the instrument ensures a good signal-to-noise ratio for any measurements, even at the most quiet sites on Earth.

### Physical properties

Casing	Aluminium
Dimension (l x b x h)	127x81x30 mm(USB/Ser) or as a 1U 19" rack mount
Temperature range	Industrial: -40 to +85 Deg. C.
Recommended application	Indoor environment
Power	110V/220V
Connectivity: - Sensor network - GPS - Uplink	Bulgin Micro Buccaneer 400, 4 pol Binder Subminiature Circular Connectors Series 719 9 pol. SUB-D female / USB B / RJ45 female
Maximum number of nodes / data rate	32 / 20ksp/s
Maximum overall network length	500 m

### Typical measurement setup

