WIRELESS TILTMETER

For long-range, remote readings in geotechnical monitoring

Measuring inclinations with tiltmeters is essential for the success of many projects: from controlling building response during a tunneling project, over analyzing settlements, to tracking changes in the inclination of structures such as bridge piers or historical monuments and dams, to monitoring landslides including berms in open pits. The Loadsensing Tiltmeter is a low-power long-range wireless datalogger and inclinometer in a single, compact box. It measures tilt in two (biaxial) perpendicular axes in the plane of the base. It combines a highly precise MEMS sensor plus the radio transmission network by Loadsensing, Worldsensing's leading connected infrastructure solution. One gateway can support several nodes in the same network. Its ability to provide accurate measures with long-range wireless communication and extended battery life sets this inclinometer apart from other comparable products in the market. The tiltmeter can also be used as a standalone logger for manual monitoring and can be easily configured and connected with a USB cable and an Android phone.

FEATURES
HARDWARE
Datalogging and tilt monitoring in a compact box
High accuracy and repeatability
Long battery life (> 5 years @ 1h sampling rate)
-40°C to 80°C (-40°F to 175°F) operating range
Reduced size (140 x 120 x 61 mm)

APPLICATIONS
Remote tilt monitoring from retaining and building walls
Landslide monitoring
Bridge pier monitoring
Structural load monitoring
Ground subsidence