

Smart Floors

Load Cell and WTS Wireless Telemetry System

Industry: IoT

Summary

Customer Challenge

Smart floors are upcoming high-tech floors that have sensors that detect movement, weight pressure and other data. Smart floors are starting to be used in senior living homes to detect falls from any patients. A force system is needed in order to measure the pressure on the smart floor.

Interface Solution

Interface suggests using multiple SSB Sealed Beam Load Cells, and installing it under the tiles of the smart floor. When someone walks on the smart flooring, data is captured and sent to WTS-AM-1E Wireless Strain Bridge Transmitter Modules. The force results are wirelessly transmitted and logged to the customer's PC using the WTS-BS-6 Wireless Telemetry Dongle Base Station with supplied software.

Results

Interface's load cells and WTS Wirelessly Telemetry Systems successfully monitor the forces and weight of those walking on the smart flooring.

Materials

- SSB Sealed Beam Load Cells
- WTS-AM-1E Wireless Strain Bridge Transmitter Modules
- WTS-BS-6 Wireless Telemetry Dongle Base Station with supplied Log100 software
- WTS-HK-S Next-Generation Wireless Handheld
- Customer PC or Laptop

How It Works

1. SSB Sealed Beam Load Cells are attached to the WTS-AM-1E Wireless Strain Bridge Transmitter Modules, which are then installed underneath the tiles of the smart flooring.
2. When a person walks on the floor, the forces measurement is logged, graphed, and wirelessly transmitted from the WTS-AM-1E to the customer's PC using the WTS-BS-6 Wireless Telemetry Dongle Base Station with supplied software. Load cells can be viewed individually, or summed.
3. Results can also be transmitted to the WTS-HK-S Next-Generation Wireless Handheld where each load cell can also be summed.

