

No Intelligent buildings or Smart buildings in the nation?



I don't want to hurt anybody's feelings, but there are not any smart buildings in the nation.

Every year, the nation spends approximately \$200 billion in energy for commercial buildings. Yet, during the workday they are unoccupied average 50%, wasting a potential \$100-\$60 billion dollars a year. **That's not smart, its kindergarten intelligence.**



Solutions for the learning buildings

Welcome to the office of the future

Control of HVAC, lighting and plug loads. Turn it off, when it's unoccupied or not required.

See www.ecWizard.net down load **ecWizard-P100**



ecWizard-P100 provides the building owner with a gradual opportunity to retrofit pneumatic zones to DDC.

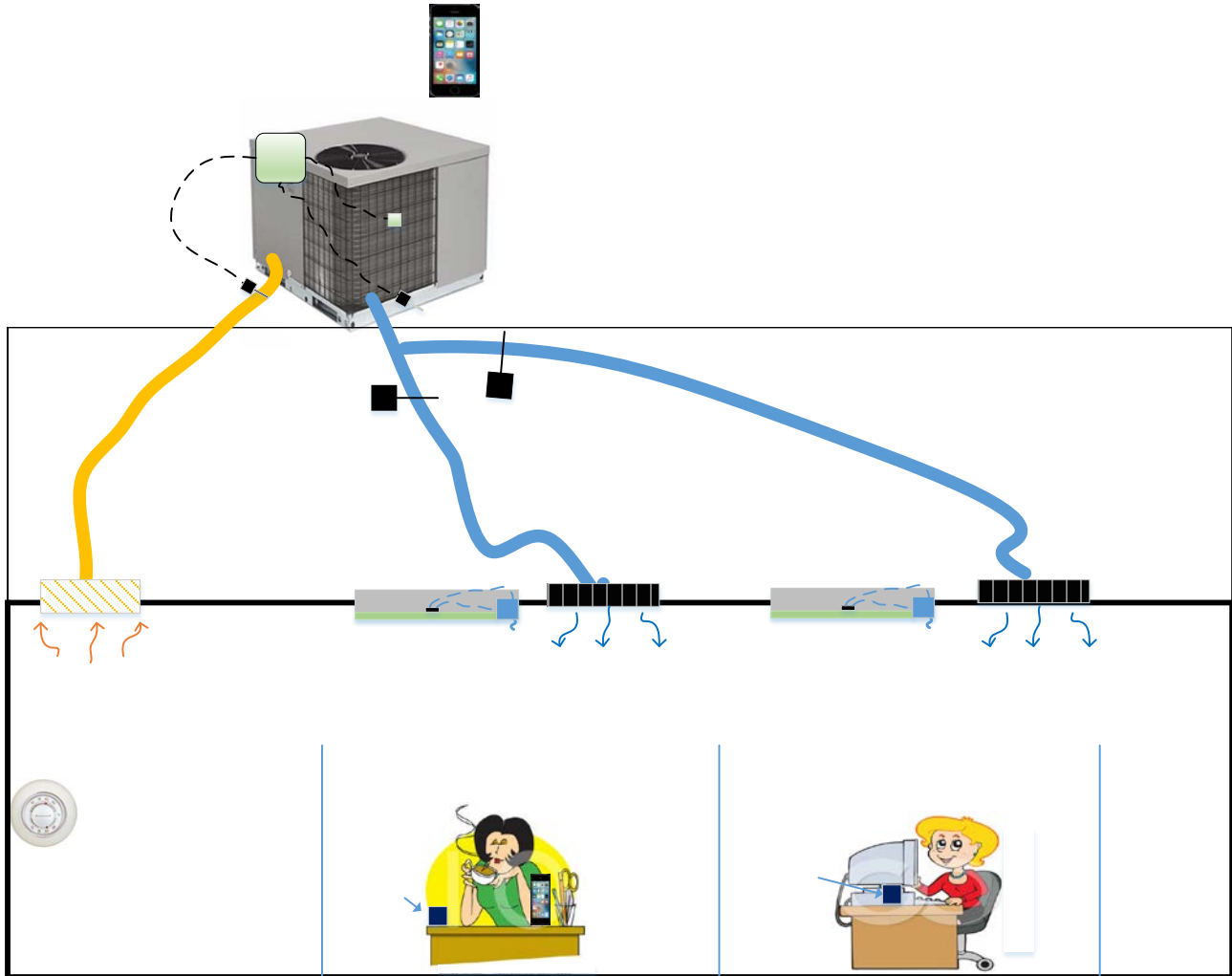
Stage 1: battery, monitoring, time clock, leaving existing pneumatic to control. (11/2 ROI)

Stage 2: 24V eliminate pneumatic thermostat while taking control of the existing pneumatic actuators.

Stage 3: all electric control typical of existing VAV modules in the market today.

ecWizard-E100 and ecWorkStation/Office

Patent Pending's



ecDeskSensor (Temp.- motion-light level) can control HVAC Unit, lighting, plug loads and damper.

The desk sensor ships directly to the consumer and is configured by the desk occupant. No labor. It has the technology to notify if; HVAC, lights and plug loads are a cost justified wireless opportunities. (It sales the other wireless devices!) Estimated cost \$40-\$50.

ecWizard P100 replaces the E100 for pneumatic retrofits. Pneumatic thermostats are in large commercial facilities. 40 million pneumatic thermostats in the nation.

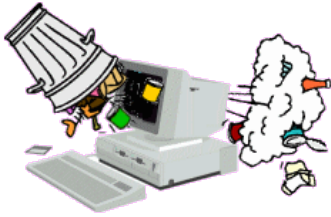
Please download additional information about our products at www.ecWizard.net

Big Data, Artificial Intelligence, Net Zero Energy



What are we missing in data and intelligence?

One of the most important wireless sensing opportunities is **amperage**. Yes, amperage tells the story about the workload of the fan, pump and chillers etc. But more important it can tell us the dollars per time of the equipment.



Garbage in garbage out

The industry has forgot what is important to the building owner and saving energy in facilities.

“What gets measured, gets managed.

Simple wireless sensors in the supply, return, flow and amperage can provide BTU/\$/Time.

Example: The chiller normally operates 100 tons at \$50 per hour if it increases to \$60 per hour we have a serious problem in the chiller operations.



ecMech sensor system utilizes inexpensive wireless sensors to monitor existing equipment no matter if it has an existing DDC system or not. Continuous commissioning of the existing control system and the mechanical equipment.

Yes, it is cost justified because now were able to monitor our equipment and predict alarm conditions. We reduce the labor cost to maintain the equipment, expose deficiencies and energy waste.

We know without a doubt that our unique line of patented and patent pending sensors and controls can improve comfort and save energy. ecMech System supports the energy-saving verification of our products.

George Fincher

Energy Controls Co.

Reno, NV (925) 382-1660 Cell george@energy-controls.com