



Building Commissioning - Testing and Verification

"ACR Data Loggers help diagnose HVAC problems by monitoring trends..."



Challenge:

The cost of energy is often a building owner's highest expense. Managing energy costs while maintaining tenant comfort frequently becomes a challenge. Whether a new installation or retrofit; mechanical systems require accurate verification during the testing, balancing and commissioning phase. Attaining adequate occupant comfort levels in a given area requires a temperature level of $22^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (72°F $\pm 1.8^{\circ}\text{F}$) and a relative humidity of $50\% \pm 5\%$ to be maintained. Any deviation indicates system problems.

ACR's Solution:

To diagnose these problems, leading HVAC engineering companies throughout the world use ACR data loggers to monitor trends in energy consumption. Spot measurements alone are not adequate. Trend logging over time will reveal problems such as inadequate air-flow, control valves reversed or jammed, faulty mechanical device sizing etc.

ACR data loggers can show building owners the way to manage energy costs by measuring power consumption. Our data loggers can pinpoint which areas of a building have temperature and RH issues. Engineers use ACR data loggers to monitor building pressure and manage their HVAC systems. ACR's data loggers and software are easy to install and require no special skills to operate.

Logged information can be viewed using our new TrendReader Standard 2 software. The software is flexible and easy to use as the main interface utilizes familiar Windows® Explorer views. With built-in menus for sample rate and mode, start delay, equations and more, logger setup is fast and easy. Equations are already included for all ACR sensors and users need only select the appropriate equation from the menu, or customize their own equation. Real-time readings are displayed in status, setup, and maximized real-time views allowing users to verify that the logger is working correctly before placing it in the field.

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ACR Products suitable for monitoring HVAC building efficiency:

Cat. #	Logger Name	Cat.#	Logger Name
01-0136	HVAC Solution Kit	01-0340	IAQ Logger
01-0015	SmartReader Plus 8	01-0036	SmartReader 8
01-0113	SmartReader Plus 2	01-0025	SmartReader 2
01-0010	SmartReader Plus 3	01-0026	SmartReader 3
01-0310	SmartReader Plus 4 LPD	01-0194	TRH-1000
01-0192	JR-1000	01-0181	SmartButton
01-0228	TrendReader Standard 2	01-0088	IC-102 USB Interface Cable

ACR's temperature and relative humidity data loggers are the most dependable tools available for monitoring HVAC systems.

