

CTRL - Energy Savings Program

Integrating Real-Time Monitoring and Leak Detection

CTRL's Energy Savings Program (CTRL-ESP) is a turn-key approach to identify ways to reduce energy waste in a manufacturing facility's compressed air system. This program provides all you need to assess, locate, monitor, calculate, and confirm energy saving opportunities. Sustain energy savings through continuous monitoring, automated data collection, leak detection, and reporting.



Continuous Energy Monitoring

- instant visual feedback
- 24/7 data logging
- automated data collection
- easy-to-read graphs
- measures real-time power usage
- measures real-time pressure usage

Identify Cost Saving Opportunities

- measure kWh and costs
- measure total leakage, pre and post survey
- calculate capacity of leaks in CFM
- identify usage patterns
- indicate usage condition changes

Fast & Easy Implementation

- installs & fully operational in less than 1 hour
- immediately ready to display & track power usage
- easy-to-use ultrasound detector kit
- pre-installed software
- no recharging of batteries
- easily integrated to InCTRL

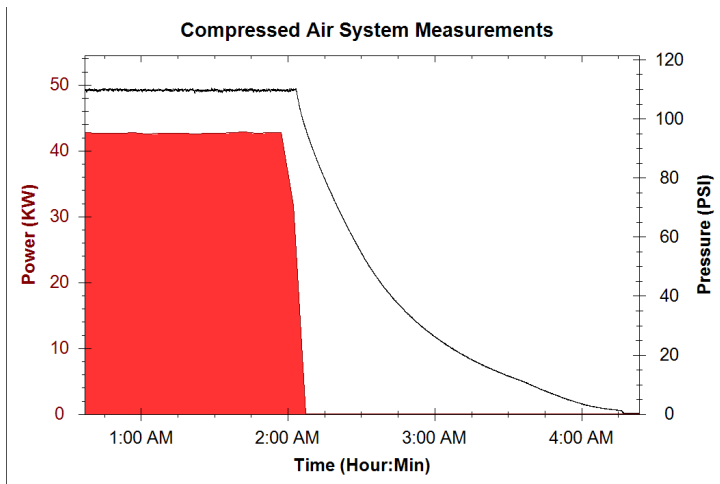
Program Includes

- UL101 ultrasound detector kit
- WATTS Aware 200
- netbook, logger, router
- energy monitoring sensors for 2 compressors
- pressure sensors for 2 compressors
- 1-1/2 days on-site training + implementation

How It Works

The monitoring system measures the total air leakage in your compressed air system and triggers as-needed surveys. When an air survey is required, technicians will use the UL101 ultrasound detector to locate the leaks and verify repairs. Measurements from kWh and CFM determine costs savings.

Significant cost savings to the bottom line



Monitors Power & Pressure Simultaneously
To Accurately Measure Compressor's Leakage

CTRL-ESP Benefits

- measures results from leak audit/repairs
- delivers data wirelessly to netbook
- delivers emergency alerts to cell phone or e-mail
- allows for condition based vs. time based audits
- automates data collecting & reporting
- sustains savings

What does the typical plant save?

A typical facility can reduce its overall electric bill between 5% and 15%. According to a U.S. Department of Energy survey, between 10% and 30% of electricity consumed is for compressed air. The typical compressed air system uses only 50% of its air supply for production. The rest is wasted or lost to air leaks.

UL101 Kit Specifications

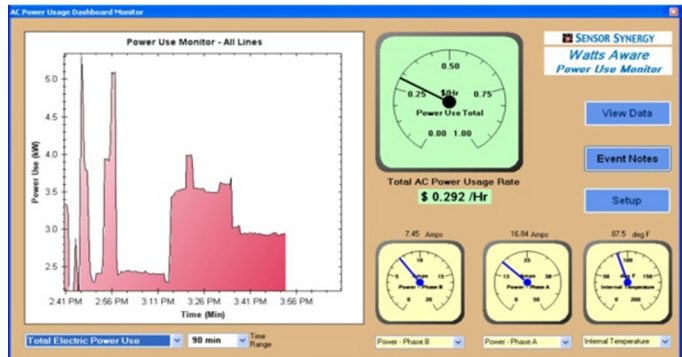
- Sensitivity: Minimum Intensity = 10^{-12} Watts/m²
- Sensitivity: Minimum Ultrasonic Pressure = 2.0×10^{-5} PA @ 40 kHz
- Working Resonance Frequency: 40 kHz +/- 1.5 kHz
- Battery: Standard 9-volt operates 45-50 continuous hours

Data Collection

- 1-second resolution (typical)
- Internet, Intranet, or LAN connectivity

Sensor Options

- 200 or 500 amp power monitoring (6 sensors)
- Max 250 psi pressure monitoring (2 sensors)



Real-Time Display Of Costs, Energy Usage,
Pressure, And Leakage

Pioneering the Way

No other ultrasound company offers "condition-based" energy savings for compressed air management. Air leak surveys are triggered by actual measurements and are not time-based. This "as needed" approach saves facility maintenance teams time and resources.