



Air Compressor Energy Audit

Let us develop a **Load Profile** for your compressed air system.



Why should I care how much energy my air compressor consumes?

Many people do not realize that over 80% of the total cost an air compressor incurs is due to power consumption to operate the unit. Is your air compressor an asset or an energy hog?

How is a Load Profile developed? What data is collected and for how long?

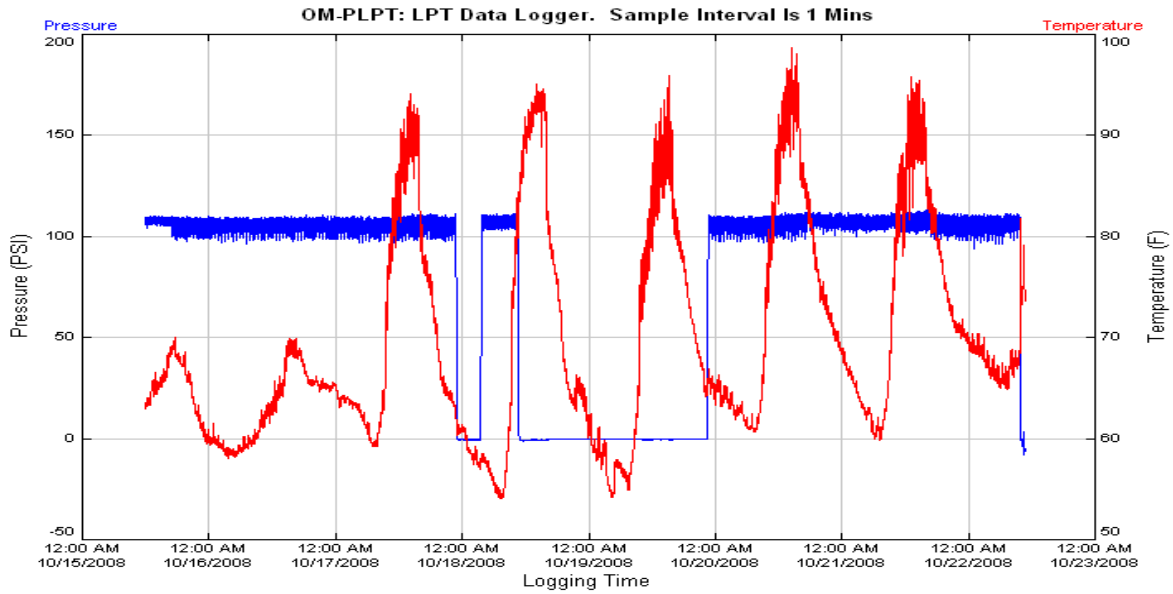
Data points are collected every minute over a seven day period for pressure, ambient temperature, amps and voltage. A pressure band is developed and can be compared over the operating shifts and weekends. Ambient compressor room temperature is logged to see if there is any issues of heat buildup, especially during the Texas summer. Amperage and voltage are logged to show when the air compressor is loaded or unloaded and if there is any issue with the voltage.

How are connections made to install your dataloggers?

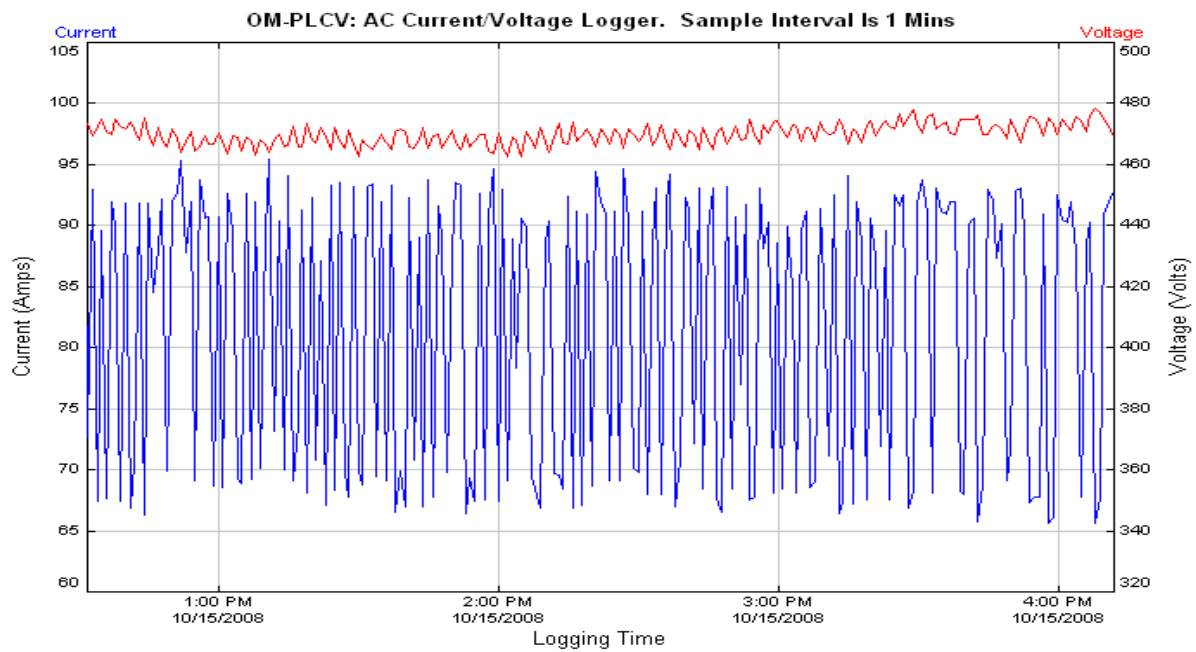
A quick disconnect needs to be installed at your air receiver & at the far end of your compressed air piping system for the pressure transducer connection. The ambient temperature probe is placed in the compressor room. An amp clamp is used around one of the main power legs and two alligator clips are connected to record voltage. The power datalogger will be placed inside the compressor control panel.



Sample recording: Blue is Pressure & Red is Compressor Room Temperature



Sample Recording: Blue is Current (Amps) & Red is Voltage.



Developing the Load Profile:

After the dataloggers have recorded for a week, the data is gathered, downloaded and analyzed to help determine your load profile and make recommendations to improve your compressed air system.

Graphs are generated that help us see how your air compressor is operating.

Pressure bands are analyzed for load/unload characteristics and if proper pressure is being achieved. The pressure data is compared to see if there are issues with pressure drop in the piping system.

Ambient temperature is analyzed to see what kind of temperatures the air compressor is exposed.

Voltage values are analyzed to make sure the motor has the proper voltage.

Amp values are analyzed to see when the air compressor is loading and unloading, are they exceeding the motor nameplate, etc.

Data is analyzed over the entire week, as well as, broken down in shifts and weekends. This will help create an accurate picture of your compressed air system and hopefully determine if it is operating at its peak efficiency. Once your Load Profile is developed, we can develop a plan to maximize your compressed air system.

Additional Services:

Ultrasonic Leak Detection

Air Compressor PM Service

Dryer PM Service

Oil Analysis

Compressor & Dryer Overhaul/Repair

Compressor Rental

New Equipment Sales



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