

Current & Voltage Data Logger

INSTRUCTION
SHEET

OM-PLCV

- One (1) Current Measurement
- One (1) Voltage Measurement



The OM-PLCV Current & Voltage Data Logger measures external Current and Voltage, simultaneously.

Simultaneous Monitoring of Current and Voltage for:

- Compressor and Fan Run Cycles
- Troubleshooting Intermittent problems
- Verification of Power Conditions

OM-PLCV: AC Current, AC Voltage Logger

The OM-PLCV data logger is a precision instrument for recording AC current and AC voltage. AC current is sampled using the supplied clamp probe. The logger can store up to 21,500 data points, when it is setup to record either AC current or AC voltage (but not both). The logger can store up to 10,750 points, when it is setup to record both AC current and AC voltage. Each logger is factory calibrated. This means that the clamp probes are not interchangeable.

Connecting the OM-PLCV to Electrical Equipment

Before connecting to any equipment follow these precautions:

- Make sure that the wires are securely attached to the connector and that no uninsulated portion of the wire is visible after the connection is made.
- Make sure that there is no strain that could pull the leads out of the OM-PLCV connector.
- Make sure that the leads will not interfere with any moving pieces of equipment and will not pull loose any wires or other connections.

To measure the voltage, connect the two voltage clip leads to the points at which the voltage is being measured. To measure the current, place the clamp probe around one of the conductors or wires in which the current is being measured.

CAUTION!

*Electrical connection to any type of operating equipment is **Dangerous!** The OM-PLCV leads and current probe should only be connected when it has been determined that the power is off and the equipment is safe to touch. **It is recommended that you always remove the OM-PLCV voltage leads before connecting the OM-PLCV to your computer!***

OM-PLCV Specifications

Sample Point Capacity	10,750 data points when AC current and AC voltage are recorded together. 21,500 points when recording only AC current or only AC voltage.
Alarms	Over and under alarms for AC current and AC voltage.
Calibration	AC current and AC voltage are factory calibrated. User single point offset calibration is available through software for both AC current and AC voltage.
Operating Temperature	32°F to 140°F (0°C to 60°C) using Alkaline Battery. -40°F to 150°F (-40°C to 65°C) using Lithium Battery.
Time Accuracy	+/-100ppm @75°F
Relative Humidity Range	0% to 95%RH non condensing
Current Range	0 to 300 Amp AC
Current Accuracy	+/- 5%
Current Resolution	0.1 Amp AC
Voltage Range	0 to 500 Volts AC
Voltage Accuracy	+/- 1 VAC
Voltage Resolution	0.1 VAC
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 Oz (71g)
Power Source	9V Alkaline or Lithium battery.
Battery Life (average use)	18 Months using Alkaline Battery. 36 Months using Lithium Battery.

Common Specifications

Sampling Interval	User selectable from 1 second to 18 hours, in 1 second increments.
Interface	COM (RS232) serial port. Software supports COM1 through COM8. Optional USB interface. (P/n OM-PL-USBS)
Alarms	Visual alarms with user selectable low and high thresholds for every channel.
Alarm Memory	Up to 50 alarm events. Alarm start time and alarm duration is stored.
Data Security	Locking sliding door prevents physical access to the logger data. Unique factory set logger id. Data collection session counter.
Compatibility	Windows 95 and above.
Minimum System Requirements	8MB of RAM, 2M of disk space, 800 x 600 resolution, 1 free COM port or a free USB port (optional USB interface is required, p/n OM-PL-USBS).
Recording Start	On door close, immediate after setup, or at a user specified data and time.
Recording Mode	Stop on memory full, or continuous recording with memory rollover.
Real Time Status	Visual indication through the status LED. User selectable status display frequency and LED brightness. Software real time status.
User Calibration	Password protected calibration for each channel.
User Message	Up to 30 characters.
Logger Channels	User selectable. Disabling channels increases the storage capacity of the other channels
Units	US and Metric. User selectable units.
Data Format	Custom format exportable to text or Excel spreadsheet.
Real Time Monitoring	Logger can be permanently connected to the computer and used as a real time, multichannel sensor with logging capability. Battery does not drain when logger is connected to the computer.