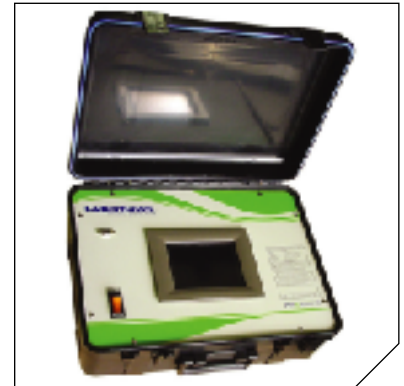


Cyberhawk[®] EP-300

EFFICIENCY & POWER METER

- Measure 'Real-World' Efficiency and Power Quality
- Simultaneous measurement of 3-phase input and output
- Revenue Class Accuracy
- Touch Screen Color display - easy setup and use
- Capture and Log Energy & PQ data
- Energy management tool
- Built-in network connection
- Quick-connect to Powersmiths SMART1 transformer metering port
- Custom SCADA interface available
- Optional triple 3-phase metering in same case



Overview

The Powersmiths Cyberhawk EP-300 Efficiency & Power Meter incorporates the latest technology to provide an unparalleled capability in a single instrument. By providing accurate simultaneous measurement of up to three 3-phase power circuits, Cyberhawk opens up a window to electrical system loading, operating efficiency and power quality, which facilitates informed guidance on energy management and financial decisions.

Applications

Electrical Power System Monitoring/Analysis

Power, losses, efficiency, harmonics and waveforms. Determine and optimize electrical power system performance.

Preventative Maintenance

Identify electrical power problems such as voltage imbalance, unbalanced loading, overloading and harmonic distortion before they result in equipment failure.

Commissioning of Installed Efficiency

High performance programs such as LEED, performance contracts and utility energy rebates all call for proof of performance. Cyberhawk measures efficiency and losses of any type of electrical power conditioning equipment from transformers to UPS systems and Static Switches.

Energy Studies

Evaluate equipment for energy usage and losses and verify equipment efficiency under real world operating conditions.

Energy Management

Evaluate energy consumption patterns, develop energy saving strategies and energy cost allocation within a facility.

Features

- Simultaneous dual 3-phase metering (triple 3-phase metering is optional)
- 4-quadrant revenue accurate metering for each of the three meters

Parameters

- RMS Voltages and currents
- Power: W, VA, VAR
- Energy: kWh, KVARh, kVAh, demand
- Efficiency
- Power Quality: THD, harmonics, k-factor...
- Waveform capture
- 3 Temperature inputs, 0-220°C
- 3 user status inputs, self-excited 24 VAC

Communication Ports

- RS232, RS485, Ethernet

Protocols

- Modbus RTU, TCP/IP

Logs

- User definable data logging with exporting capability
- Time Stamped Event Logging (Alarms), user defined.

User Interface & Display

- Color Q VGA 'Touch Screen', Soft Key, Menu Driven

Platform

- Portable implementation of the Powersmiths PMP-30 Power Management Platform.



POWERSMITHS PMP-30 POWER MANAGEMENT PLATFORM.

Technical Data

PARAMETER	NOMINAL	RANGE	ACCURACY IN % Full Scale (F.S.)
Voltage	208 to 600 VAC	20% to 125%	± 0.1%+0.01% FS
Current	5A	20% to 125%	± 0.1%+0.01% FS
Frequency	50/60Hz	±15% of nominal	± 0.1%
Power: * kW, kVAR, kVA	–	20 - 125%	± 0.3%
Energy: * kWh, kVARh, kVAh	–	20 - 125%	± 0.3%
Total Power Factor	–	0 - 1	± 1%
Cos φ (displacement)	–	0 - 1	± 1%
Total Harmonic Distortion (THD)	–	0 - 200%	± 1%
Individual Harmonics	–	up to 31st	±5%
K-Factor	–	1 - 30	± 10%
Crest Factor	1.414	1 - 5	± 5%
Neutral Current	–	–	± 2%
Temperature (measurement)	25°C	0 to +220°C	± 2%
Clock	–	–	± 3 sec/day
* ANSI 12.20	–	1 - 200%	Class 0.5



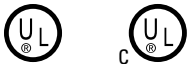
SIMPLE TWISTLOCK CONNECTION TO POWERSMITHS SMART1 INTEGRATED TRANSFORMER METERING PORT



MEASURING THE INSTALLED EFFICIENCY & POWER QUALITY OF A TRANSFORMER.

Available Options

- Twist lock voltage and current cables for quick-connect to Powersmiths SMART1 transformer metering port.
- Safety Banana plug adaptor kits to connect voltage and current probes.
- Status Cable to access Temperature and TVSS data. Available in twist lock configuration for SMART1 connection, and banana plugs for other configurations.
- Multi-Range Clamp-On CTs (5Amp secondary) calibrated to 0.5% accuracy
 - 100-200-400 Amps
 - 150-300-600 Amps
 - 250-500-1000 Amps
 - 1000-2000-3000 Amps
 - others available
- Custom software development for specific applications
- SCADA Software package for remote monitoring



Warranty

1 Year. CYBERHAWK is a trademark of Powersmiths International Corp. Other trademarks and service marks profiled herein are the property of their respective owners. Technical specification subject to change without notice.

POWERSMITHS™

U.S.A. - Sales / Support
8400 Esters Blvd., Suite 140
Irving, Texas 75063
U.S.A.
T: 972.929.0770
F: 972.929.0977
Help: 866.929.0770

Canada
10 Devon Road
Brampton, Ontario L6T 5B5
Canada
T: 905.791.1493
F: 905.791.8870
Help: 800.747.9627

Email: info@powersmiths.com • www.powersmiths.com