Cyberhawk™ 300 Multi-Port Meter

THREE METERS IN ONE

The Cyberhawk 300 is an advanced Web-enabled power management meter that provides an extensive array of power and power quality measurements for informed energy and power management decisions. It comes with one, two or three 3-phase ports for the simultaneous measurement of up to three independent points in the system. This enables the Cyberhawk 300 to directly measure the efficiency of 2-port devices such as transformers and UPS systems.

REAL-TIME MONITORING FOR IMPROVED SYSTEM RELIABILITY

Cyberhawk 300 is invaluable for ensuring electrical system reliability. Real-time measurements of up to three ports are available for:

- Comprehensive power and power quality parameters
- Power quality (THD, harmonics, waveforms, etc.)
- Up to four independent temperatures
- Actual transient currents through TVSS devices
- Event (Alarm) recording with time/date stamp
- User definable inputs including pulse measurements (gas, water)
- User definable outputs for annunciation and control

Allowing you to manage and validate:

- Power/energy usage
- Equipment performance and efficiency
- Performance of the TVSS device

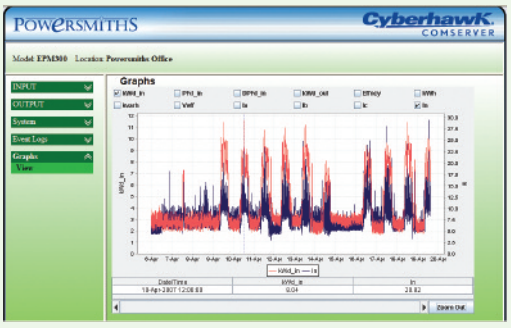
FACILITATES ENERGY MANAGEMENT PROGRAMS

Cyberhawk 300 incorporates SCADA type software that provides live and historical data and event logs to enhance power management programs. Cyberhawk 300 data files can be uploaded to your network or individual PC, allowing you to store an unlimited amount of data for analysis and energy management. Use Cyberhawk 300 data to:

- Benchmark and trend building electrical performance
- Identify cost avoidance opportunities by load profiling
- Correlate equipment malfunctions to power quality anomalies
- Consolidate tracking of utilities (electricity, water and gas)
- Validate and enhance energy savings
- Support education for sustainability programs.

PROVIDES WEB-ENABLED MONITORING AND REPORTING

Cyberhawk 300 measures and computes extensive electrical system parameters and records deviations from user set points as date/time stamped events. Its integrated WEB Server provides remote access via an Internet/Intranet connection for all data including events, data logs and waveforms enabling you to monitor and manage the electrical system anytime anywhere.



KEY FEATURES

- Three meters in one
- Directly measures the efficiency of transformers and other 2-port devices
- Measures transient currents through surge protection devices
- Offers convenient Web accessible system data
- Supports education for sustainability programs such as Powersmiths Interactive Learning Systems
- Packaged ready for immediate installation

DESCRIPTION

The Cyberhawk 300 is built on the Powersmiths Cyberhawk PMP-30 Power Management Platform. It is packaged in a NEMA 2 case and pre-wired for easy installation with compression terminals, including fused voltage disconnects and 'shunting' CT terminal blocks (for maintenance).

The unit is equipped with a user-friendly menu-driven touch screen display. The standard display is monochrome 128x64 pixels. The optional ¼ VGA monochrome or color screen is required for local viewing of waveforms and harmonic histograms. The Cyberhawk 300 is accessible over an Ethernet connection (Intranet) or the Internet (IP setup dependent) using a standard Java enabled Internet Browser. It also has built-in support for building management systems using native Modbus protocol.

The Cyberhawk 300 interfaces to the electrical system via user-installed CTs. These are normally supplied separately, as CTs are application specific (eg. current and Bus dimensions). It is directly powered by the 3-phase Voltage sensing lines, eliminating the need for a separate 120V feed and can operate through poor power quality conditions including less than 50% voltage on any available phase and ride through momentary interruptions.

All meter setup parameters are password protected and may also be set locally at the screen or remotely using the available Powersmiths software installed on a PC platform including resetting energy registers and event logs. User settable correction factors (gain and phase) minimize PT and CT errors (Note CTs supplied by Powersmiths are error characterized). Events/Alarms thresholds are user settable for magnitude, delay and action.

ORDERING INFORMATION

Cyberhawk-300 - 1P - 600/480 - M - X - X

Ports	Voltage	Display	Option	Other Options
1P: 1 x 4 wire **2P**: 2 x 4 wire **3P**: 2 x 4 wire, 1 x 3 wire	208/120 600/480	**S**: 128 x 64 Pixel **M**: 1/4 VGA Mono **C**: 1/4 VGA Color	**S**: SPD Currents	Note: Listed as applicable

Selection of some options may change enclosure size and weight. Consult factory for detailed product data sheet for these and other configurations. *Specific case used determined by factory unless specified.

TECHNICAL SPECIFICATIONS

SYSTEM RATINGS:
208/120 Model: 208/120V 50/60 Hz
600/480 Model: 600/347V 60Hz 480/277 50/60Hz
Operating range: -50% to +135% of nom. 1 or 3-phase
Ride through: > 200ms
Burden: < 13W

PORTS 1, 2 & 3 CONFIGURATIONS:
Port 1, 2, 3: 1-phase Single/Split
Port 1, 2, 3: 3-phase D (3-wire, 2-CT)
Port 1, 2: 3-phase Y (4-wire, 3-CT)
Protection: Fused disconnects; Shorting CT Terminals
Accuracy: 0.1% typical (V & I), 0.5% Power/Energy
CT Ratio: Up to 8,000:5
PT Ratio: Up to 65,000:120
Correction Factors: ± 3 % (PTs and CTs) ± 3˚ phase

RELAY OUTPUTS:
Contacts: 2 x SPDT; 5A @ 250VAC

AUXILIARY INPUTS:
Digital: 2 (self-biased 24VDC)
Temperature: 4 Type A Thermistor inputs
(1 ambient sensor provided)

MEMORY:
Events: 1,000 in NV RAM
Clock: Battery-backed
Firmware: Flash based; field upgradeable

COMMUNICATION:
Ethernet: 10/100 BaseT
Protocols: TCP/IP, Modbus TCP 4-level Password
RS485 (alternate): 2-wire to 19.2kB, Modbus

HUMAN INTERFACE:
Touch Screen: 128 x 64 pixel (¼ VGA optional)
Setup: Local and Remote by software
Access Restriction: Password protected

DATA LOGS:
Parameters: 20 (user selectable)
Log Interval: 10 sec. to 1 hour
Built-in Log Time (parameters x log interval):
example - 4 months for 12 parameters @15 min
Network/PC based Log Time: unlimited

PHYSICAL:
Size: 24"H x 16"W x 8"D; 47 lbs weight
Mounting: Wall (bracket included)
Enclosure: NEMA 2
Temperature: -10˚C to + 40˚C

WARRANTY:
5 year limited warranty

ENERGY STAR PARTNER

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Technical specifications subject to change without notice.

Printed on acid free, elemental chlorine free paper. Paper contains 50% recycled content including 15% post consumer waste.

POWERSMITHS

POWERSMITHS INTERNATIONAL CORP. 10 Devon Road, Brampton, Ontario L6T 5B5 Canada
Phone: (905) 791-1493 Toll-free: (800) 747-9627 Fax: (905) 791-8870 Email: info@powersmiths.com
www.powersmiths.com

807-000431-128-A01