

# PowerHawk<sup>®</sup> Smart Meters

## 4X06 Multi-Point Building Automation Meters

One of the lowest density members of Triacta's Building Automation Metering family, the PowerHawk<sup>®</sup> 4X06 is designed to meter or monitor branch offices, remote loads, and other low density applications that need to integrate with building automation systems. PowerHawk 4X06 meters provide six meter elements that can be configured to any combination of 1 phase, 2 phase or 3 phase meters or monitors.

The PowerHawk 4306 combines revenue-grade electrical submetering with Building Automation communications technology — complying with all regulatory electric safety and communications requirements and meeting stringent ANSI 0.5 Accuracy Class standards. The PowerHawk 4206, combined with split-core current transformers, offers a cost-effective non-sealable monitoring solution for green retrofit applications and new builds.

The PowerHawk 4X06 meters transmit data over MODBUS TCP, MODBUS RTU over RS-485, and BACNet/IP connections to form the metering foundation for Building Automation applications. The 4X06 meters also incorporate Triacta's advanced IP Push communications technology for communicating metrology and status information to remote servers. Providing simultaneous multi-protocol communications makes the 4000 series the perfect choice for the Intelligent Building market.

- ✓ Fast installation for new construction or retrofits with maintenance free design
- ✓ Measures Wh delivered & received, VARh delivered & received, VAh, Vrms, Irms
- ✓ Datalogging: Non-volatile flash memory unaffected by power outages, stores up to 2.4 years of interval data
- ✓ MODBUS<sup>®</sup> TCP, MODBUS RTU over RS-485 and BACnet<sup>®</sup>/IP protocols for building automation integration
- ✓ Built-in DHCP or static IP configuration
- ✓ Uses high-speed internet, 100BASE-T Ethernet standard



## 4X06 Multi-Point Building Automation Meter Features

- » Electronic solid state device supports up to 6 single phase meters, 3 two phase or 2 three phase meters
- » Measures Active, Apparent, Reactive Power, Vrms and Irms
- » 2 Pulse inputs to collect data from electric, water and/or gas meters
- » 4306 supports 80 mA and 100 mA output CT's – 300' (100m) with 22 AWG twisted pair cable
- » 4206 supports split-core 333 mV CT's
- » Multiple Communications Ports: Ethernet, RS-232
- » Building Automation protocols: MODBUS® TCP, BACnet®/IP
- » Push reporting to an Energy Management System such as Triacta's PowerHawk Manager
- » Remotely configurable
- » Interval and Net Metering

## Communications Interfaces

- » Single 10/100BASE-T Ethernet Port
- » Protocols: TCP/IP, DHCP, HTTP, PPP, SNMP, FTP, MODBUS TCP, BACnet/IP
- » Communications Header accommodates single optional V.90 modem, PLC or Wireless Communications Module

## Meter Specifications

- » Voltage: 120/208V, 120/240V, 240/416V, 277/480V (Higher voltage supported with potential transformers)
- » Voltage Tolerance: +/- 10%
- » 50Hz and 60Hz models
- » Service Type: Single, Poly & 3-Phase + Neutral
- » Accuracy: ANSI C12.20 0.5 Accuracy Class
- » Measurements: Wh delivered & Received, VARh delivered and received, VAh, Vrms, Irms
- » Logged Interval: 5 to 60 minutes
- » Operating Temperature: -40 to 70°C
- » Operating Humidity: 0 to 90% non-condensing
- » For indoor use only; NEMA4 cabinet available for outdoor applications
- » Maximum Altitude: 3000m
- » Pollution Degree: 2

## Reporting Capabilities

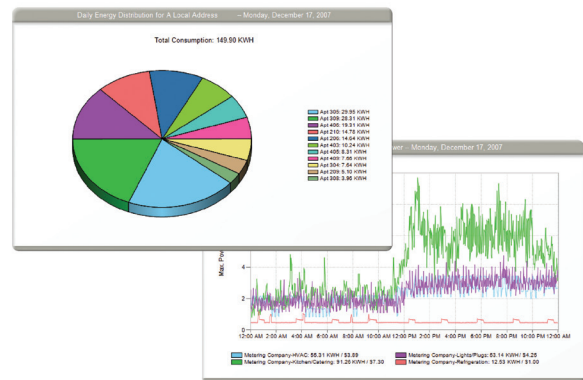
- » On-Board Display: Liquid Crystal with button scroll
- » AMR File Type: Human Readable CSV file
- » Frequency: configurable; real-time, hourly, or daily reporting
- » Pulse Inputs: two pulse in terminal blocks (2 wire) compatible with dry form A and solid state form A contacts
- » On-Board Memory: Non-volatile flash memory is unaffected by power outages; holds up to 2.4 years of meter data (1 hour intervals) for 20 years
- » On-Board real-time clock with battery back-up (holds time up to 10 years)
- » Management Server: configurable to report to PowerHawk Manager or any server supporting FTP – frequency as high as every 5 minutes
- » MODBUS TCP Slave Device
- » BACnet/IP with Alarm & Event Services

## Preliminary Physical Characteristics

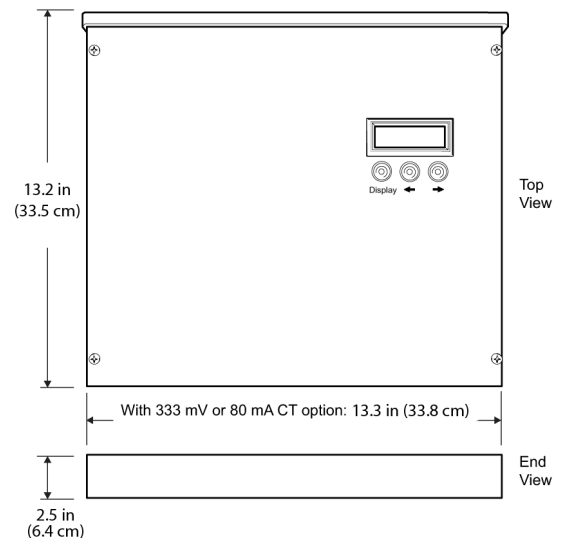
- » Size: 33 cm H x 30 cm W x 5 cm D (13 in H x 12 in W x 2 in D)
- » Weight: 3.98 kg (8.77 lbs)

## Preliminary Regulatory Approvals

- » **Safety:** TUV and UL certified to IEC/EA/UL/CSA - 61010-1 2nd Edition CSA-C22.2 No. 61010-1-04
- » **Emissions (EMC):** FCC Part 15 Class A, ICES-003, IEC6100-4-5
- » **Surge power/telephone lines:** ANSI/TIA968-A: 2002
- » **Accuracy & Billing:** ANSI/C12.20 0.5 Class
- » This product is not designed for sealed meter applications. For these applications use PowerHawk 6000 series.



Optional PowerHawk Manager SaaS can be used for meter provisioning, management, and to inventory, benchmark, verify or bill energy use



PowerHawk 4X06 meter dimensions

## More Information

For more information about Triacta's Intelligent Building submetering solutions, visit [www.triacta.com](http://www.triacta.com), email [info@triacta.com](mailto:info@triacta.com), or call 1-877-797-4295, 1-613-256-2868, or in the U.S. 1-214-296-2142