

PowerHawk[®] Smart Meters

6X20 High Density Meters

The PowerHawk[®] 6X20 High Density Meter series is designed to meter multi-tenant office buildings, medium-sized retail, institutional, multi-tenant residential and other high density applications that need to integrate with building automation systems, managed meter networks, or the “Smart Grid”. The PowerHawk 6X20 series provides fifty meter elements that can be configured as 1 phase, 2 phase or 3 phase meters or monitors.

The PowerHawk 6320/6420 combines revenue-grade electrical submetering with advanced communications technology, complying with all regulatory electric safety and communications requirements and meeting stringent ANSI 0.5 Accuracy Class standards. The PowerHawk 6220 combined with split-core current transformers offers a cost-effective monitoring solution for green retrofit applications and new builds.

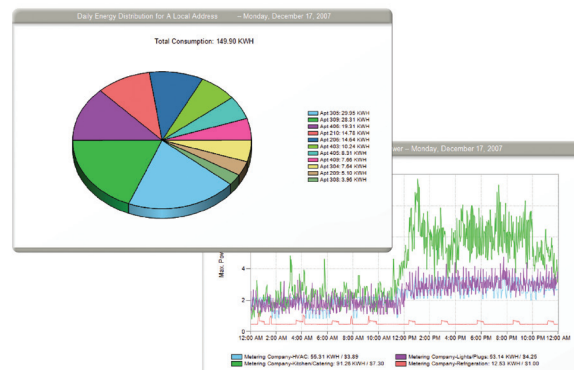
Using advanced IP-based communications, the 6X20 series transmits data over existing wireless, phone, or high-speed Internet connections without the cost of a dedicated service. There’s no need to purchase or maintain additional computers or meter reading equipment. All PowerHawk 6X20 systems use open protocols ensuring the flexibility to meet any scenario, including integration with existing building automation, Energy Management Systems or IT business systems.

- ✓ Fast installation for new construction or retrofits with maintenance free design
- ✓ Measures Wh Vrms and Irms
- ✓ Datalogging: Non-volatile flash memory unaffected by power outages, stores up to 2.4 years of interval data
- ✓ MODBUS[®] TCP protocol for building automation integration
- ✓ Built-in DHCP and push FTP for firewall friendly connections to a central server. PPP for modem connection
- ✓ Uses existing wireless, phone, or high-speed internet. 10BASE-T Ethernet standard



6X20 High Density Meter Features

- » Electronic solid state device supports up to 20 single or two phase meters, or up to 10 three phase meters and 10 two phase meters
- » Measures Wh, Vrms, Irms
- » 1 Pulse input to collect data from electric, water and/or gas meters
- » 6220 supports split-core 333 mV CT's
- » 6320 supports 80 mA CT compatible: 300' (100m) with 22 AWG twisted pair
- » 6420 supports 5A output CTs
- » Multiple AMR Technologies: Modem, Ethernet, PLC, 802.11 Wireless
- » Building Automation protocols: MODBUS® TCP
- » Remotely configurable
- » Push reporting to Energy Management servers
- » 5 minute to 60 minute demand Intervals



Communications Interfaces

- » Ethernet port: 10 Mb/s
- » Protocols: TCP/IP, DHCP, HTTP, PPP, SNMP, FTP, MODBUS TCP
- » On board V.90 modem, external PLC or wireless communications

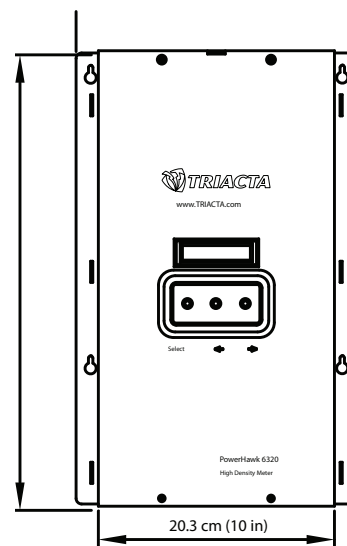
Optional PowerHawk Manager SaaS can be used to inventory, benchmark, verify, or bill energy use

Meter Specifications

- » Voltage: 120/208V, 120/240V (Higher Voltage supported with potential transformers)
- » Voltage Tolerance: +/- 10%
- » Service Type: Single phase, 2 phase network & 3-Phase + Neutral
- » Accuracy: ANSI C12.1, C12.18, C12.20 0.5 Accuracy Class
- » Measurements: Wh, Vrms, Irms
- » Demand Interval: 5 to 60 minutes
- » Operating Temperature: 0 to 50°C
- » Operating Humidity: 0 to 90% non-condensing
- » For indoor use only
- » Maximum Altitude: 2000m
- » 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: one pulse in terminal block (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 480 days of meter data (1 hour intervals) for 20 years
- » On-Board Real-time clock with battery back-up
- » Management Server: configurable to report to PowerHawk Manager or any server supporting FTP – frequency as high as every 5 minutes
- » MODBUS TCP Slave Device



PowerHawk 6X20 meter dimensions

Physical Characteristics

- » Size: 40.6 cm H x 20.3 cm W x 5.1 cm D (16 in H x 10 in W x 2 in D)
- » Weight: 2.4 kg (5.3 lbs)

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/C12.16 0.5 Class Measurement Canada LMB-EG-7, AE-1434 (6320 only) CDFA Certification (6320 Only)

More Information

For more information about Triacta's smart submetering solutions visit www.triacta.com, email info@triacta.com or call 1-877-797-4295, 1-613-256-2868, or in the U.S. 1-214-296-2142