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ENERGY MANAGEMENT PLATFORM

COMPATIBLE METERS GUIDE: COMPATIBLE WITH ANY MODBUS OR BACNET METER

EMon3000

The E-Mon D-Mon® Class 3000 meter is a 3-element meter with communications. The device is used to monitor electric power usage of individual loads after the utility meter and store kW and kVAR data for automatic meter reading.

EMon5000

The E-Mon D-Mon® Class 5000 meter is a 3-element meter with communications. The device is used to monitor electric power usage of individual loads after the utility meter and store kW and kVAR data for

EMON 3000 (BACnet)

The E-Mon D-Mon Class 3000 meter is a 3-element meter with communications. The device is used to monitor electric power usage of individual loads after the utility meter and store kW and kVAR data for automatic meter reading. (BACnet version)

GE-PQMII

The GE Multilin PQMII Power Quality Meter is an ideal choice for continuous monitoring of a single or three-phase system. It provides metering for current, voltage, real power, reactive power, apparent power, energy use, cost of power, power factor, and frequency. Programmable setpoints and four assignable output relays allow control functions to be added for specific applications. This includes basic alarm on over/under current or voltage, unbalance, demand-based load shedding, and capacitor power factor correction control. More complex control is possible using the four switch inputs; these can also be used

Hawkeye8035 | Hawkeye8036

The H8035 and H8036 three-phase power transducers monitor energy parameters from aggregate kW (real power) and kWh (consumption) to power factor per phase. Integration of electronics lowers hardware and installation costs. The sensors automatically detect phase reversal, so CT load orientation is not a concern. The CTs and electronics are calibrated as a set, so it is necessary to color-match the CTs and voltage leads when installing. These devices monitor up to 63 loads at a time on a single RS-485 drop. With two platforms to choose from (H8035 Basic/Energy Only or H8036 Enhanced Data Stream), the applications for these devices are diverse, including aggregate billing, tenant monitoring, energy management, performance contracting, demand limiting and cooling plant optimization.

HawkeyeH8163CB

The H8163-CB energy meter communication board is an optional field-installable kWh, Consumption board for the H8163 energy meter that allows Modbus RTU communication. The kW, Real power H8163-CB also enables the energy meter to provide true kW & kVAR demand kVAR, Reactive power information. The easy-to-install H8163-CB provides a simple, cost-effective way to network the H8163 energy meter on a Modbus network.

ION6200

The ION 6200 series meters give you the tools to manage complex energy supply contracts that include commitments to power quality. Integrate them with our ION Enterprise operations software or other energy management and SCADA systems through multiple communication channels and protocols, including MV-90.

ION9300

The ION 9300 series meters give you the tools to manage complex energy supply contracts that include commitments to power quality. Integrate them with our ION Enterprise operations software or other energy management and SCADA systems through multiple communication channels and protocols, including MV-90.

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Dent -Power Scout3037

The PowerScout 3037 is light-weight and compact enough to mount within an electrical panel. It is used for long-term monitoring of electrical systems.

Shark 200

The Shark 200 unit is an ultra-compact power metering device, providing industry leading revenue metering functionality combined with advanced data-logging, communication and I/O traditionally found only in high performance and high cost systems. This product is designed to incorporate advanced features in a cost effective, small package for large scale, low cost deployment within an electrical distribution system.

Veris GWN-CO

GWN Series gas platform offers a convenient means for sensing gases in the environment. The GWN is mounted to any single-gang electrical box and wired to the building controller. Then, a single AGxx gas sensor is installed in the GWN. With this design, there is no need for a costly new installation when a sensor reaches the end of its life. The GWN platform remains installed, and the installer simply opens the GWN housing to replace the modular sensor inside, reducing labor costs and downtime. AG Series sensors can be swapped in the GWN platform at any time with minimal effort. The GWN platform converts the signal from the AG sensor into an analog or relay signal compatible with building control systems.

Veris-E50

The E-Mon D-Mon® Class 3000 meter is a 3-element meter with communications. The device is used to monitor electric power usage of individual loads after the utility meter and store kW and kVAR data for automatic meter reading.

Veris-CWxP

Veris CWxP wall mounted sensors with protocol output measure the levels of CO 2 , RH (if equipped), and temperature (if equipped) of air inside a room. The CO 2 sensor employs the Automatic Baseline Calibration (ABC) feature that enables the sensor to operate within accuracy specifications for the calibration interval of 5 years. RH equipped models feature a replaceable humidity element (HS2NX or HS2XX), available through Veris.

Veris FLEX E20

Enercept FLEX E20 Series power and energy meters provide a unique solution for measuring energy data. Designed with the user in mind, the E20 Series offers maximum application flexibility for retrofit applications. The E20 Series is compatible with split-core, solid-core and Veris U018 Series rope-style Rogowski current transducers (CT) from five to 5000 amperes, often allowing installers to utilize existing CTs with the meter. Adding to its versatility, the E20 has a wide input range of 90 to 480 Vac, alleviating the need to keep multiple models in stock. The meter's small form factor enables installation in existing panels with limited space, and does not require external mounting or the expense of extra enclosures or conduit runs. Communicating models support auto detection of baud rate, parity, and protocol for Modbus RTU and BACnet MS/TP.

Veris E31

The E31xY63 model includes a main circuit board and two adapter boards mounted to a single plate, with custom designed flat ribbon cables connecting the main board to these two adapter boards. Up to 42 split-core CTs (50A 100A, or 200A, sold separately) allow the E31xY63 to monitor up to 42 branch circuits. Each conductor passes through a current sensor and terminates at the breaker. Each sensor transmits the current data to the data acquisition board. The E31xY63 can be expanded to monitor 84 branch circuits by adding two additional adapter boards, two ribbon cables, and 42 additional split-core CTs. However, these parts must be purchased and mounted separately. When fully equipped, the E31 system measures the current, voltage, and energy consumption of up to 92 circuits (84 branch circuits, 2 3-phase mains, 2 neutrals) with eight auxiliary inputs on a single board. One E31 system can monitor up to two panels.

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HMW90

The wall-mounted Vaisala HMW90 Series HUMICAP® humidity and temperature transmitters measure the relative humidity and temperature of indoor environments, where high accuracy, stability, and reliable operation are required. The HMW90 Series includes models for both current and voltage output. These flexible transmitters offer a variety of options and features. Transmitters are available with an optional display. The HMW90 Series humidity transmitters are quick and easy to install. The wiring is connected secured to the wall through the back plate and the electronics with the sensors can then be easily snapped on. Dip switches for transmitter configuration can be accessed when the enclosure is open.

Honeywell H-Series Class 500

Veris CWxP wall mounted sensors with protocol output measure the levels of CO 2 , RH (if equipped), and temperature (if equipped) of air inside a room. The CO 2 sensor employs the Automatic Baseline Calibration (ABC) feature that enables the sensor to operate within accuracy specifications for the calibration interval of 5 years. RH equipped models feature a replaceable humidity element (HS2NX or HS2XX), available through Veris.

Honeywell Din-Mon

The Honeywell Din-Mon meter (originally an E-Mon D-Mon product) is used to monitor electric power usage of individual loads after the utility meter and store kW and kVAR data for automatic meter reading. The model D2 kWh meter has an RS-485 communication for remote reading.

EnGenius ENG-9000

The EnGenius Intelligent Power Monitor is a two processor based power monitoring device that monitors and records numerous power system parameters. The EnGenius continuously measures voltage and current to calculate and display over 65 values. 120 to 600V can be monitored without the need of potential transformers. 601 to 32000 V can be monitored with the use of potential transformers. All scaling calculations are handled by the meter. The Engenius comes standard in a NEMA 4 rated enclosure ready to be mounted. A data port is provided on the front interface for easy setup and trend retrieval via EnGenius desktop software. Data logging can be added at initial purchase or added later as your needs develop. Built for the future, the EnGenius allows for feature upgrades through the data port.

IAQ-N

The Honeywell Analytics IAQ-N Series provides indoor air quality monitoring of CO2, temperature, and RH for demand control ventilation applications. The monitor can be programmed for BACnet or Modbus communication for easy installation and integration into existing building automation systems. The IAQ-N

iFACTS-Plugsmart-1

This particular PowerScout meter is a customized meter used by iFACTS/Plugsmart in the Ohio area.

ION9200

The ION 9200 series meters give you the tools to manage complex energy supply contracts that include commitments to power quality. Integrate them with our ION Enterprise operations software or other energy management and SCADA systems through multiple communication channels and protocols, including MV-90.

Obvius A8911-23

The A8911-23 is designed for pulse counting applications where large number of pulse output devices need to be connected to a Modbus network. The A8911-23 will count contact closures on 23 separate inputs and store the totalized pulse count internally using non-volatile memory. The pulse count totals are then read using the RS485/Modbus protocol. Applications include reading gas/water/electric meters in common building areas for energy information and reporting purposes.

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PowerLogicCM2000

The PowerLogic Circuit Monitor is a multifunction, digital instrumentation, data acquisition and control device. It can replace a variety of meters, relays, transducers and other components. The circuit monitor is equipped with RS-485 communications for integration into any power monitoring and control system.

PowerLogicCM250

The PowerLogic Circuit Monitor is a multifunction, digital instrumentation, data acquisition and control device. It can replace a variety of meters, relays, transducers and other components. The circuit monitor is equipped with RS-485 communications for integration into any power monitoring and control system.

PowerLogicCM3000

The PowerLogic Circuit Monitor is a multifunction, digital instrumentation, data acquisition and control device. It can replace a variety of meters, relays, transducers and other components. The circuit monitor is equipped with RS-485 communications for integration into any power monitoring and control system.

PowerLogicDRLSX01

The PowerLogic Digital Relay is a multifunction, digital instrumentation, data acquisition and control device equipped with RS-485 communications for integration into any power monitoring and control system.

PowerLogicPM3000

The PowerLogic PM3000 series power meters are a cost-attractive, feature-rich range of DIN rail-mounted power meters that offers all the measurement capabilities required to monitor an electrical installation. Ideal for power metering and network monitoring applications that seek to improve the availability and reliability of your electrical distribution system, the meters are also fully capable of supporting sub billing

PowerLogic PM800 Series

The PowerLogic Power Meter Series 800 offers many high-performance capabilities needed to meter and monitor an electrical installation in a compact 96 x 96 mm unit. All models include an easy-to-read display that presents measurements for all three phases and neutral at the same time, an RS-485 Modbus communication port, one digital input, one KY-type digital output, total harmonic distortion (THD) metering, and alarming on critical conditions. Four models offer an incremental choice of custom logging and power quality analysis capabilities. Expand any model with field-installable option modules that offer a choice of additional digital inputs and outputs, analog inputs and outputs, and Transparent Ready Ethernet port.

PowerScout3037

The PowerScout 3037 is light-weight and compact enough to mount within an electrical panel. It is used for long-term monitoring of electrical systems.

TEMCO HUM-W

The TEMCO HUM-W is a humidity and temperature sensor designed for environment monitoring and controlling in industrial, commercial, and other buildings. This transmitter can be used for indoor air temperature and humidity monitoring in various industrial plants, clean rooms, labs, machine rooms, commercial buildings, airports, and schools. The modbus interface is documented and integrator friendly. The TEMCO HUM-W also has transducer outputs for connecting as analog inputs to all popular control systems.

Data Industrial 3000

The Series 3100 Monitor is an economical, dual channel, full featured, digital rate and totalizing monitor, compete with set-point control, scaled pulse output, analog outputs, analog PID controller, USB, and RS485 Modbus and BACnet communication

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WattNode Modbus

The WattNode Modbus is a kilowatt hour (kWh) energy and power meter that communicates on a EIA RS-485 network, measures 1, 2, or 3 phases with voltages from 120 to 600 volts Vac and currents from 5 to 6,000 amps in delta (phase to phase) and wye (phase to neutral) configurations.

Viconics VZ7260PI

The Viconics VZ7260PI controller family is specifically designed for local pressure dependent VAV zone control within Viconics Zoning System product family

EE 210

The E+E model EE210 relative humidity/temperature transmitter provides RH readings at +/-1.3% accuracy using a capacitive sensor offering 10% to 90% operating range. The transmitter comes in wall, duct and remote mounting styles. The transmitter has multiple field selectable outputs including 4-20mA, 0-10V and 0-5 VDC. The supply power required can be 24 VAC or 24 VDC.

LD1500 Leak Detector

LD1500 Leak Detector from RLE Technologies

GE-369 Motor Management Relay

The 369 Motor Management Relay is a digital relay that provides protection and monitoring for three phase motors and their associated mechanical systems. A unique feature of the 369 Relay is its ability to 'learn' individual motor parameters and to adapt itself to each application. Values such as motor inrush current, cooling rates and acceleration time may be used to improve the 369 Relay's protective capabilities.

Gems 3100-3p Gems 3500-3p

The Gems 3100 is a multi-meter which can support 18 circuits. This means that adding this meter will result in the creation of 6 individual 3-phase meters which will all have to be readdressed and renamed if desired. This is the 3-phase version of this meter, which assumes a 3-phase, 4-wire connection.

CMD58-CO

The Greystone Energy Systems CMD5B Series Carbon Monoxide Sensor provides analog output of CO levels in enclosed spaces such as schools, offices, malls, or theaters. Features of the CMD5B Carbon Monoxide sensor include a front-panel back-lit LCD, a front panel test switch, status indications and an alarm buzzer.

MegaTron Chemical Feeder

The Advantage Controls MegaTron is capable of supporting TCP/IP communications via Ethernet and Data Modem. This allows for connections to our custom embedded web server via local networks and our browser based WebAdvantage service. Advantage Controls has now implemented Modbus/TCP support which allows interfacing with more customizable PC applications using HMI/SCADA and stand-alone HMI systems.

Degenerate Phase E50

This meter is a standard Veris E50C2 which has been connected to a three-phase system at only a single voltage-tap available (as is the case when a step-down transformer provides only a single phase). Assumes that Phase-A is connected. This is not appropriate for a edge-grounded delta configuration. Single phase voltage line-neutral through the mismatched transformer actually represents the line-line voltage. Power factor cannot be calculated and must be manually entered in the power-factor point calculation. Do not use this template unless advised by Entronix tech-support.

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EE 160

Specially designed for HVAC applications, the EE160 sensor by E+E Elektronik is a cost effective, highly accurate and reliable solution for measuring relative air humidity and temperature. The enclosure minimizes installation costs and provides outstanding protection against contamination and condensation, thus ensuring flawless operation. The EE160 employs the new humidity/temperature E+E sensor element HCT01 with excellent long term stability and resistance against pollutants. It provides an accuracy of +/- 2.5%RH,is available for wall or duct-mounted form, and offers either current or voltage outputs. The EE 160 Series' versatility is expanded with the configurator adapter cable (HA011059), which can be used with the free configurator software for easy on-site adjustment of the humidity and temperature.

FT2A

The Fox FT2A Series thermal mass flow meters are perfect for measuring the flow of natural gas, compressed air, propane, oxygen, and most other common gases. The flow meters measure both flow-rate and temperature, with isolated 4-20 mA outputs for both variables. In addition, a separate pulse output can be used for logging total gas flow. The FT2A mass flow meters measure gas flow velocity as low as 50 sfpm (standard feet/minute) and as high as 50,000 sfpm, without the need for temperature or pressure compensation. Each flow meter is calibrated at the factory using the same gas as the application. As a result, the FT2A more than meets EPA accuracy requirements for monitoring both boiler intake gas and combustion emissions. Standard models include a 2 line x 16 character bright white backlit display for viewing flow rate, flow total, elapsed time, process gas temperature and alarms. The FT2A has an integral keypad for setting parameters such as signal spans, pulse frequency scaling, pipe area, zero cutoff, filtering, diagnostics and alarms. The FT2A Series is available in two styles, inline or insertion. The inline models (male NPT) include built-in flow conditioners which reduce the need for long straight runs of upstream and downstream pipe. The most common inline sizes are 1/2 to 2 and other inline sizes are available. The insertion models install in a 3/4 coupling (field provided) and are available in insertion lengths to fit pipes from 1-1/2 to 72. Both inline and insertion styles come standard with stainless steel wetted parts, an integral NEMA 4X enclosure rated for Class I, Div. 2, Groups B,C,D hazardous areas, and a NIST calibration certificate.

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Onicon System-10

ONICON's System-10 is a true heat (Btu) meter, which accepts data from several sensors, performs a series of computations with that data, and displays and/or transmits the results as an indication of the amount of heat (Btu's) being transferred per unit time or as a totalized amount.

PVP Commerical Inverter

PV Powered commercial inverters combine the benefits of high reliability, low lifetime cost, and leading efficiency into one easy-to-install system. Their cutting edge design features the latest advancements in power technology, including an intelligent power module that uses fifth generation, self-protecting IGBT silicon—the most efficient and reliable silicon technology available. System reliability is ensured by superior quality components, including an integrated 98%-efficient, Energy Star-rated transformer with field-configurable AC voltage output; acid-free, long-life, film-type capacitors; and a medical-grade DC power supply that provides clean, reliable power to system control components.

The PVP30kW-LV is designed for trouble-free installation with UL-approved, load-break-rated AC and DC disconnects. The modular design enables rapid field service and field upgrades. With corrosion-resistant, aluminum construction and—at half the size and weight of comparable products—it can quickly and easily be installed in your preferred location, indoors or out.The PVP30kW-LV is designed for trouble-free installation with UL-approved, load-break-rated AC and DC disconnects. The modular design enables rapid field service and field upgrades. With corrosion-resistant, aluminum construction and—at half the size and weight of comparable products—it can quickly and easily be installed in your preferred location, indoors or out.

Sierra Instruments Thermal Mass Flow

Features the unique Smart Electronics Package for field rangeability, flow-range adjustment and validation and diagnostics. With very low pressure drops and wide turndowns, these products are hazardous-area approved by CSA and CRN (Canada); FM (USA); ATEX, CE and PED (EU); GOST R (Russian Federation); and Chinese Pattern Approval (China). Meter accuracy is +/- 1% of reading, plus +/-0.5% of full scale with repeatability of +/- 0.2% of full scale.

System Sensor FAAST

The FAAST - Fire Alarm Aspiration Sensing Technology aspirating smoke detector is an advanced particulate detection system designed for use in early warning and very early warning fire detection applications. FAAST draws air from the environment through sampling holes in a pipe network and monitors for smoke particulates. FAAST includes a local display which provides a clear indication of the devices status. Smoke particulate level, alarm level, air flow, and faults can all be discerned with a glance at the user interface.

Ubiquity mPort

The mPort is an mFi Networked Machine Interface and Monitor. It connects a variety of devices, including the mFi Sensors, to the mFi machine-to-machine network. This particular mPort controller configuration is preconfigured to attach to a single dry-contact door/window sensor.

FSR Series Flow-BTU

Ultrasonic flow and energy metering systems clamp onto the outside of pipes without contacting the internal liquid. The technology has many advantages over other products including low-cost installation, no pressure head loss, no moving parts to maintain or replace, excellent fluid compatibility, and a wide bidirectional measuring range that ensures reliable readings even at very low and very high flow rates. Veris ultrasonic metering products are available in a variety of configurations that permit selection of an ideal system, no matter what the application. The monitor is available in two versions: standard flow and energy flow versions. Energy versions are used in conjunction with dual clamp-on or insert RTD temperature sensors. The energy flow meter calculates energy usage in BTU or tons, and it is ideal for retrofit, chilled water, and other HVAC and building automation applications.