

# **CLASS 3000 METER ENGINEERING SPECIFICATIONS**

**E-Mon D-Mon**

Energy Monitoring Products & Systems

## ***Class 3000 Meter Specifications***

Meter shall be fully electronic with 4-line by 20-character backlit LCD display showing kwh, kW demand (with peak date and time), power factor per phase, real-time load in kW, Amps per phase and Volts per phase.

Meter shall utilize 0-2 volt AC output current sensors to allow paralleling and/or mounting up to 500 feet from the meter. Sensors shall be of split-core configuration to allow installation without disconnecting cabling, etc. Sensors shall be available from 25 amp to 3200 amp. Sensors shall be optionally available in solid-core configuration (100 & 200 amp.)

Meter shall provide installation diagnostics on display.

Meter shall be enclosed in a heavy-duty JIC steel enclosure suitable for indoor installation. Meter enclosure shall provide a method of locking to prevent unauthorized access.

Meter shall be UL/CUL Listed to latest applicable standards for safety.

Meter shall meet or exceed ANSI C12 accuracy standards.

Meter shall provide non-volatile memory to maintain reading during power outages.

Meter shall store interval data for kW and kVAR for up to 36 days in first-in first-out format. (Standard firmware).

Meter shall operate as slave device when used with Modbus or BACnet options.

Meter shall provide a third data channel for logging inputs from third-party metering devices (gas, water, BTU, etc.) via a built-in, two-point plug-in terminal block.

Meter shall be capable of daisy-chain or star connection using RS-485 communications in combinations of Class 3000s, IDR-8s, IDR-16s not to exceed 52 devices. (IDR-16s count as two devices.) Cabling shall be available through RJ-11 modular jack (4-conductor) or terminal block (3-conductor), 24-26 AWG, up to 4,000 cable feet total.

Meter shall be available with optional telephone modem (requires a dedicated analog phone line).

Meter shall be available with optional Ethernet interface (requires a unique static IP address).

Meter shall communicate via RS-232/RS-485 with optional Modbus RTU.

Meter shall be capable of communicating over Ethernet via Modbus TCP/IP or BACnet IP. Each meter must connect directly to the BACnet/Modbus backbone and have a unique static IP address.

Meter shall be MV-90 compatible (Specify when ordering.)

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