**Class 5000 Three-Phase Advanced Smart Meter - Engineering Specifications**

**The specifications below are designed to be cut and pasted into your engineering/ordering documents for easy specification of E-Mon D-Mon Class 5000 Smart meters.**

**• Meter shall be fully electronic with 4-line LCD display showing kWh.**

**• Meter shall use 0-2 volt output split-core 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 powering down. Sensors shall be available from 100 amp to 3200 amp. Sensors shall be optionally available in solid-core configuration (100 & 200 amp.)**

**• Meter shall provide current sensor installation diagnostics indicator, phase error indicator and phase angle diagnostics on display.**

**•Meter shall be field programmable for meter date/time, IP address and ID code for communication option and optional load control settings.**

**• Meter shall be enclosed in a NEMA 4X polycarbonate enclosure (standard) with padlocking hasp & mounting flanges for indoor/outdoor installation (stand alone) with one 1 1/16" KO on bottom of enclosure. Optional heavy duty JIC steel enclosure available for indoor installation.**

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

**• Meter shall meet or exceed ANSI C12.20 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 72 days in first-in first-out format. (Standard firmware.)**

**• Meter shall operate as a slave device when used with Modbus or Lonworks options. Meter works as a master device on BACnet MS/TP.**

**• Meter shall provide optional 5th & 6th channel for logging inputs from third-party metering devices (gas, water, BTU, etc.) Both channels provide interval data logging that can be read via E-Mon Energy software and Modbus.**

**• Meter shall be capable of daisy-chain or star connection using RS-485 communications in combinations of Class 3200s, 3400s, 5000s, IDR-8s, IDR-16s not to exceed 52 devices. Cabling shall be available through terminal block (3-conductor), 18-22 AWG, up to 4,000 cable feet total.**

**• Meter shall be available with the following communication protocol & option packages:**

**\*\* See next page for Port info…**

|  |  |  |
| --- | --- | --- |
| **RS-485 Port** | **Ethernet Port** | **Specify** |
| EZ7 | EZ7 Ethernet | 01 |
| Modbus RTU | EZ7 Ethernet | 02 |
| BACnet MS/TP | EZ7 Ethernet | 03 |
| EZ7 | Modbus TCP/IP | 04 |
| EZ7 | BACnet IP | 05 |
| Modbus RTU | Modbus TCP/IP | 06 |
| Lonworks FT-10 | EZ7 Ethernet | 07 |
| Lonworks FT-10 | Modbus TCP/IP | 08 |
| EZ7 w/Telephone Modem | EZ7 Ethernet | 09 |
| EZ7 w/Telephone Modem | Modbus TCP/IP | 10 |
| EZ7 w/Telephone Modem | BACnet IP | 11 |