

# CLASS 5000 Smart Meter

Advanced kWh/Demand Meters with Communication

**E-Mon D-Mon**

Energy Monitoring Products & Systems

## Features

- Advanced 4-line display showing:
  - kWh
  - kW demand (with peak date & time)
  - Power factor per phase
  - Real-time load in kW
  - Amps per Phase
  - Volts per phase
- On-board set-up option for:
  - IP address
  - Meter date/time
  - ID codes for EZ7, Modbus and BACnet
- 0-2 volt output split-core current sensors allow for enhanced safety and accurate remote mounting of sensors up to 500 feet from meter without power interruption. (Optional solid-core sensors available.)
- Onboard installation diagnostics and verification system.
- Two external meter inputs (water, gas, BTU, etc.) (Channels 5 & 6, available via E-Mon Energy only)
- Two pulse outputs
- Phase loss alarm. (N.O. Contact)
- Built-in RS-485 communication capability supports the following connection configurations (or combinations not to exceed 52 devices per channel):
  - Up to 52 Class 3200, 3400 and 5000 meters and/or IDR interval data recorders
  - Cabling can be either daisy-chain or star configuration, 3-cond., 18-22 AWG, up to 4,000 cable ft total per channel.
- Communications
  - Built-in RS-485 and Ethernet
  - Telephone Modem (optional)
- Protocols
  - BACnet MS/TP\*
  - BACnet IP\*
  - EZ7
  - LonWorks FT-10 (Twisted Pair)\*
  - Modbus RTU
  - Modbus TCP/IP
- Records kWh and kVARh delivered, kWh and kVARh received in first four channels. Data stored in 15-min. for up to 72 days or 5-minute intervals for up to 24 days. Maintains data in a first-in, first-out format.
- Compatible with E-Mon Energy software via EZ7 protocol for automatic meter reading, energy billing and profiling.
- Meter is designed for use on both 3-phase, 3-wire (delta) and 3-phase, 4-wire (wye) circuits.
- Outdoor 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 industrial grade JIC steel enclosure with padlocking hasp and mounting flanges for indoor installation. Knockouts: 1 1/16" (3/4" cond.) bottom, 7/8" (1/2" cond.) top
- UL/CUL Listed. Certified by independent test lab to ANSI C12.20 national accuracy standards. (+/- 0.2% from 1% to 100% of rated load)
- MV-90 Compatible (with EZ7 only.)



Dimensions: 6" H x 6" W x 4 1/4" D

## Model Numbers

### 120/208-240V, 3-Phase

E50-208100-R\*KIT (100 amp)  
 E50-208200-R\*KIT (200 amp)  
 E50-208400-R\*KIT (400 amp)  
 E50-208800-R\*KIT (800 amp)  
 E50-2081600R\*KIT (1600 amp)  
 E50-2083200R\*KIT (3200 amp)

### 277/480V, 3-Phase

E50-480100-R\*KIT (100 amp)  
 E50-480200-R\*KIT (200 amp)  
 E50-480400-R\*KIT (400 amp)  
 E50-480800-R\*KIT (800 amp)  
 E50-4801600R\*KIT (1600 amp)  
 E50-4803200R\*KIT (3200 amp)

### 347/600V, 3-Phase

E50-600100-R\*KIT (100 amp)  
 E50-600200-R\*KIT (200 amp)  
 E50-600400-R\*KIT (400 amp)  
 E50-600800-R\*KIT (800 amp)  
 E50-6001600R\*KIT (1600 amp)  
 E50-6003200R\*KIT (3200 amp)

## Enclosure Options

Meters supplied standard in NEMA 4X outdoor enclosures. Not available in MMU Configuration. To order a JIC Steel enclosure replace "R" in model number with "J" (E50-208100-J01KIT)

## Communication Protocol & Option Packages

Specify protocol package when ordering all meters. Replace \* in model number with protocol package specification below.

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

NOTE: All meter kits include one set of three (3) split-core current sensors.

\*NOTE: Interval data not stored in BACnet or LonWorks units.