

## Features

- Advanced 4-line display showing:
  - kWh delivered, received and Net 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)
- 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
  - EZ7
  - Modbus RTU
  - Modbus TCP/IP
  - BACnet MS/TP\*
  - BACnet IP\*
  - LonWorks FT-10 (Twisted Pair)\*
- 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.
- Green JIC Steel enclosure with padlocking hasp & mounting flanges for indoor installation with one 1 1/16" KO (3/4" cond.) on bottom of enclosure available
- Optional gray NEMA 4X polycarbonate enclosure available with padlocking hasp & mounting flanges for indoor/outdoor installation (stand alone) with one 1 1/16" KO on bottom of enclosure.
- 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: 7 1/4" H x 7" W x 3 1/4" D

## Model Numbers

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

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

### 277/480V, 3-Phase

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

### 347/600V, 3-Phase

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

## Enclosure Options

Meters supplied standard in Green JIC Steel enclosures. Not available in MMU Configuration. To order a Gray NEMA 4X outdoor enclosure replace "J" in model number with "R" (E50-208100-R01-N-KIT)

## Communication Protocol & Option Packages

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

RS-485 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: Interval data not stored in BACnet or LonWorks units.

### Green Class Net Smart Meter Specifications

Meter shall be fully electronic with 4 line LCD display showing kwh delivered, received and net kWh.

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 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 options.

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

Meter shall be UL/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 EZ-7 firmware).

Meter shall operate as 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 through RJ-11 modular jack (4-conductor) or terminal block (3-conductor), 18-26 AWG, up to 4,000 cable feet total.

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

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

Meter shall be MV-90 compatible (With EZ7 Only)