

# CLASS 3200 Smart Meter

Advanced kWh/Demand Meters with RS-485 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 phaseOn-board set-up option for:
  - Meter date/time
  - ID codes for communication option
- Available in MMU (Multiple Meter Unit) enclosures containing up to 24 meters in one compact enclosure.
- 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.
- Built-in RS-485 communications capability supports the following connection configurations (or combinations not to exceed 52 devices per channel):
  - Up to 52 Class 3200, 3400, 5000 meters and/or IDR interval data recordersCabling can be either daisy-chain or star configuration, 3-conductor, 18-22 AWG, up to 4,000 cable feet total per channel.
- RS-485 Protocol Options
  - E-Mon Energy EZ7 (Standard)
  - Modbus RTU
  - BACnet MS/TP
- Records kWh and kVARh delivered, kWh and kVARh received in first 4 channels. Data stored in 15-min. intervals for up to 72 days or 5-minute intervals for up to 24 days. Maintains interval data storage in a first-in, first-out format.
- Compatible with E-Mon Energy Software via EZ7 protocol for automatic meter reading, billing and profiling of interval energy data. Ethernet communication available when used with Ether-Mon Key.
- 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 Enclosure: Industrial grade JIC steel enclosure with padlocking hasp and mounting flanges for indoor installation. (stand alone) Knockouts: 1 1/16" (3/4" cond) on bottom and 7/8" (1/2" cond) on top 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. (EZ7 only)



Dimensions: Stand Alone: 6" H x 6" W x 4 1/4" D  
MMU-8 Cabinet: 24" H x 12" W x 7" D

## Model Numbers

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

E32-208100-REZ7KIT (100 amp)  
E32-208200-REZ7KIT (200 amp)  
E32-208400-REZ7KIT (400 amp)  
E32-208800-REZ7KIT (800 amp)  
E32-2081600REZ7KIT (1600 amp)  
E32-2083200REZ7KIT (3200 amp)

### 277/480V, 3-Phase

E32-480100-REZ7KIT (100 amp)  
E32-480200-REZ7KIT (200 amp)  
E32-480400-REZ7KIT (400 amp)  
E32-480800-REZ7KIT (800 amp)  
E32-4801600REZ7KIT (1600 amp)  
E32-4803200REZ7KIT (3200 amp)

### 347/600V, 3-Phase

E32-600100-REZ7KIT (100 amp)  
E32-600200-REZ7KIT (200 amp)  
E32-600400-REZ7KIT (400 amp)  
E32-600800-REZ7KIT (800 amp)  
E32-6001600REZ7KIT (1600 amp)  
E32-6003200REZ7KIT (3200 amp)

## Enclosure Options

Meters supplied standard in NEMA 4X outdoor enclosures. To order a different enclosure replace "R" in model number with optional enclosure specification.

JIC Steel Enclosure-Specify J-(E32-208100-JEZ7KIT)  
MMU Configuration-Specify M-(E32-4801600MEZ7KIT)

## Communication Protocol Options

Meters supplied standard with EZ7 protocol. To order a different communication protocol replace "EZ7" in model number with optional protocol specification.

Modbus RTU-Specify RTU (E32-480100-JRTUKIT)  
BACnet MS/TP-Specify BAC (E32-600100-RBACKIT)

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

**E-Mon**

Energy Monitoring Products

# **CLASS 3200 SMART METER** **E-Mon D-Mon** **ENGINEERING SPECIFICATIONS** Energy Monitoring Products & Systems

## **Class 3200 Smart 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 100 amp to 3200 amp. Sensors shall be optionally available in solid-core configuration (100 & 200 amp.)

Meter shall be field programmable for meter date/time and ID code for communication options.

Meter shall provide installation diagnostics on display.

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 MMU enclosure or heavy duty JIC steel enclosure available.

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 kWh and kVARh for up to 72 days in first-in first-out format. (Standard firmware).

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 terminal block (3-conductor), 18-22AWG, up to 4,000 cable feet total.

Meter shall be available with the following communication protocols:

Requires E-Mon Energy software for reading:  
EZ7 RS-232/RS-485 hard-wire connection (Standard)

Requires third-party EMS/BMS system supplied by others. E-Mon Energy software not used:  
Modbus RTU Communications (Replace EZ7 in model with RTU when ordering)  
BACnet MS/TP (Replace EZ7 in model with BAC when ordering)

