

# 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 Din-Mon D2 & D5, Class 3200, 3400, 5000 meters and/or IDR interval data recordersCabling is daisy-chain configuration, 3-conductor, 18-22 AWG, up to 4,000 cable feet total per channel.
- RS-485 Protocol Options
  - E-Mon Energy EZ7
  - Modbus RTU
  - BACnet MS/TP (BTL certified)
- 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. Optional single-phase, 3-wire configuration available.
- 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. Meets or exceeds ANSI C12.20 national accuracy standards. (+/- 0.2% from 1% to 100% of rated load)
- CE Mark approved.
- Meter meets or exceeds MID accuracy standards.
- 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, 127/220V, 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)

### 220/380V, 230/400V, 240/415V, 3-Phase

E32-400100-REZ7KIT (100 amp)  
E32-400200-REZ7KIT (200 amp)  
E32-400400-REZ7KIT (400 amp)  
E32-400800-REZ7KIT (800 amp)  
E32-4001600REZ7KIT (1600 amp)  
E32-4003200REZ7KIT (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, 4 Wire (Wye Configuration)

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)

## Options

Three-phase meter kits are supplied with (3) split-core current sensors.

To order a single-phase, 3-wire meter kit add "-SP" before KIT in the model number. Ex. E32-208100-REZ7-SPKIT  
Single-phase meters will be supplied with (2) split-core current sensors.

## 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: Interval data not available via BACnet.

# **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 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 be CE Mark approved.

Meter shall meet or exceed MID 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. Interval data not available via BACnet.

Meter shall be optionally available in single-phase, 3-wire configuration.

Meter shall be capable of daisy-chain connection using RS-485 communications in combinations of Din-Mon D2 & D5, 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 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)

BACnet protocol shall be BTL certified. LonWorks protocol shall be LonMark certified.

