

# iCON™ A Residential Meter

## with Integrated Sensus FlexNet® SmartPoint™ Display Board

With the SmartPoint integrated display our iCon Advanced residential meter is one of the most efficient and reliable AMI-ready electric meters available. The meter combines AMI communications and meter display on one board, making the meter much more reliable and efficient than AMR meters with expansion boards. An optional remote disconnect allows commands from a Tower Gateway Base Station (TGB) to disconnect and connect customer service.

FlexNet offers a simple, reliable, and flexible solution that is economical for mass meter deployments, strategic deployments, and rural applications.

### Sensus iCon A Meter Features

- Integrated FlexNet AMI on display board
- Internal resolution to 10 Watt-hours
- Power outage and restoral notification
- Power Quality reporting
- kWh and kVAh energy measurements
- Simple net metering and full net metering
- Demand, including block, sliding, peak and cumulative demand
- Load Profile
- Time-of-Use
- Remote disconnect
- Remote meter firmware downloads
- Accuracy exceeds ANSI C12.20 (Class 0.2)



### Integrated FlexNet SmartPoint Features/Options

- Programmable daily, hourly, 15- and 5-minute read intervals
- Instant demand reads
- Restoral notification, tamper, and theft detection
- Two-way and one-way communication options
- Outage and restoral correlation
- Remote connect/disconnect, load control
- Supports water and gas meters
- Only AMR system FCC approved to operate on unshared primary-use licensed spectrum

### Advanced Sentec\* Sensor Technology

- Designed for billing accuracy
- Reliable, one-piece construction
- Complete DC immunity

\*Includes technology licensed from Sentec, Ltd.

# iCON<sup>A</sup> Residential Meter

## Product Availability

Service	Class	Form	Voltage Rating (Vac)
2-wire	100, 200	1S	120, 240
3-wire	200, 320	2S	240
2-wire	20	3S	120, 240
3-wire	20	4S	120, 240
3-wire	200	12S	120
3-wire	200	25S	120

## Specifications

### Power Requirements

- Voltage Rating: See Chart Above
- Frequency: 60 Hz

### Accuracy

- Exceeds Accuracy Class 0.2

### Burden

- Power Supply < 0.8 watts/7.9 VA @ 240 Vac
- Voltage Circuit per phase: 0.03 watts @ 240 Vac
- Current circuit per phase 0.1 milliohms Typical @ 25°C

### Remote Disconnect

- Meter Forms 1S, 2S, 12S
- 2-Pole, single-throw
- Magnetic latching
- **Rating:** 200 A, 230 Vac, 50/60Hz, PF 0.7/0.8 lagging
- **Endurance:** 6000 cycles, 200 A, 230 Vac, 50/60 Hz, PF 0.7/0.8 lagging
- **Overload:** 50 OPS, 300 A, 230 Vac, 50/60 Hz, PF 1.0
- **Current Withstand:**  
Per IEC 1036, ANSI C12. 1: 7,000 A Peak (5,000 A rms) 230 Vac, 50/60 Hz, for 6 cycles at 0.7/0.8 PF with normal operation after exposure;  
12,000 A rms for 4 cycles with fail safe conditions after exposure.

### Operating Environment

- Temperature: -40° to +85°C
- Humidity: 0% to 95% non-condensing
- Transient / Surge Suppression:  
EN61000-4-4:1995 & EN61000-4-5:1995, exceed voltage and current surge requirements per Category 4

### Complies with Industry Standards

- ANSI C12.1 – 2001
- ANSI C12.10 – 1997
- ANSI C37.90.1 – 1989
- FCC Part 15

### Characteristic Data

- Starting Watts: 5
- Temperature Rise Specifications:  
Meets ANSI C12.1 Section 4.7.2.9

### Tamper Detection Options

- If the iCon meter is reversed in the socket, energy is added to the forward direction
- The iCon meter can place a tamper message in the display that can alternate with the kWh reading

### LCD Display

- Six-digit liquid crystal display
- Data digit height: 0.4
- Simulated mechanical disk emulation / 1 watt-hour increments
- Power flow indicator
- kWh display with segment check option

### Dimensions

- Diameter: 6.95 in (17.65 cm)
- Depth: 5.00 in (12.70 cm)