

# CENTRON® C1S

## specifications

### CENTRON® C1S Meter

#### Overview

With this solid-state meter, Itron presents a platform for residential metering with the flexibility to adapt as your needs expand and change.

The CENTRON C1S solid-state meter is used for measuring singlephase energy consumption. It is available as an energy meter with an LCD register. As an option, the meter is available with interchangeable personality modules, including demand, time-of use (TOU), load profile and various communication options.

#### Flexible Platform

- > The CENTRON® meter can easily be upgraded to any of the option modules available.
- > All calibration data is permanently stored in the base of the meter on the CENTRON metrology board.

#### Personality Modules

- > The interchangeable personality modules are part of a snap-in register assembly.
- > The personality module houses all register or communication functions.





# CENTRON C1S Meter Specifications

## Enhanced Performance

- > Low starting watts
- > Low burden
- > Captures energy that was not monitored in the past by electromechanical meters

## Tamper Resistant

- > Measures energy even if the meter is inverted.

## Standard Features

- > Electronic LCD Register
- > Polycarbonate cover
- > Test LED

## Option Module Upgrades

- > Demand Module (C1SD)
- > TOU with demand module (C1ST)
- > Load Profile with TOU and demand module (C1SL)
- > R300 900 MHz RF module (C1SR)

## Option Availability

- > Glass Cover
- > Electronic Detent
- > Identification/Accounting Aids

## Technical Data

Meets Applicable Standards

- > ANSI C12.1 - 1995
- > ANSI C12.10 - 1997
- > ANSI C12.20 (Class 0.5) - 1998
- > ANSI C37.90.1 - 1989
- > ANSI C62.45 - 1992
- > IEC 61000-4-4
- > IEC 61000-4-2
- > FCC Part 15, Subclass C

## Reference Information

- > CENTRON Technical Reference Guide
- > CENTRON C1SR Specification Sheet
- > CENTRON C1SC Specification Sheet
- > CENTRON C1SD, T, L Specification Sheet
- > Price Bulletin 110
- > Hardware Specification Form
- > ZRO-C2A Handheld Meter Resetter Instructions

## Power Requirements

- > Voltage Rating: 240V
- > Operating Voltage:  $\pm 20\%$
- > Frequency: 60 Hz
- > Operating Range:  $\pm 3$  Hz

## Operating Environment

- > Temperature:  $-40^{\circ}$ to  $+85^{\circ}$ C
- > Humidity: 0% to 95% non-condensing
- > Transient / Surge Suppression:
  - ANSI C37.90.1-1989
  - IEC 61000-4-4
  - ANSI C62.45-1992

## Accuracy

- > ANSI C12.20 0.5 accuracy class

## General LCD Display

- > Five-digit liquid crystal display
- > Data digit height: 0.4"
- > Annunciator height: 0.088"
- > Electronic Load Indicator

## Characteristic Data

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

## Burden Data\*

- > Voltage Circuit:
  - Voltage 240
  - Watts 0.5
  - VA 7.5
- > Current Coil-Self Contained Test Amp Current 60 Hz:
  - Service 3-Wire
  - Test Current (Amps) 30
  - VA < 0.50

\* Burden Data applies to FM2S 240V meter.

## Shipping Wt.

- > Polycarbonate
  - 4 Meter Cartons: 8.9 lbs / 4.04 kg
  - 96 Meter Pallets: 214 lbs / 97.30 kg
- > Glass
  - 4 Meter Cartons: 13.96 lbs / 6.35 kg
  - 96 Meter Pallets: 335 lbs / 152.30 kg

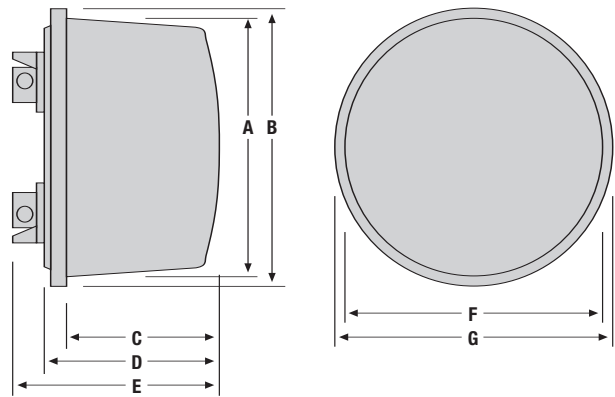


## CENTRON C1S Meter Specifications (cont.)

### Product Availability

- > 120V 2-wire
  - Meter Class: 100
  - Test Amps: 15
  - Kh (Pulse/Wh): 1.0
  - Form No.: 1S
  - Register Description: LCD
  - Digits & Multipliers: 5 x 1
  - Catalog Number w/glass: 98038
  - Catalog Number w/poly: 98039
- > 120V 2-wire
  - Meter Class: 100
  - Test Amps: 15
  - Kh (Pulse/Wh): 1.0
  - Form No.: 1S
  - Register Description: LCD
  - Digits & Multipliers: 4 x 10
  - Catalog Number w/glass: 98040
  - Catalog Number w/poly: 98041
- > 240V 3-wire
  - Meter Class: 200
  - Test Amps: 30
  - Kh (Pulse/Wh): 1.0
  - Form No.: 2S
  - Register Description: LCD
  - Digits & Multipliers: 5 x 1
  - Catalog Number w/glass: 98008
  - Catalog Number w/poly: 98009
- > 240V 3-wire
  - Meter Class: 200
  - Test Amps: 30
  - Kh (Pulse/Wh): 1.0
  - Form No.: 2S
  - Register Description: LCD
  - Digits & Multipliers: 4 x 10
  - Catalog Number w/glass: 98010
  - Catalog Number w/poly: 98011
- > 240V 3-wire
  - Meter Class: 320
  - Test Amps: 50
  - Kh (Pulse/Wh): 1.0
  - Form No.: 2S
  - Register Description: LCD
  - Digits & Multipliers: 5 x 1
  - Catalog Number w/glass: 98122
  - Catalog Number w/poly: 98123

- > 240V 3-wire
  - Meter Class: 320
  - Test Amps: 50
  - Kh (Pulse/Wh): 1.0
  - Form No.: 2S
  - Register Description: LCD
  - Digits & Multipliers: 4 x 10
  - Catalog Number w/glass: 98124
  - Catalog Number w/poly: 98125



### Dimensions

- > Polycarbonate
  - A: 6.29" / 16c
  - B: 6.95" / 17.7c
  - C: 2.7" / 6.9c
  - D: 3.16" / 8c
  - E: 4.53" / 11.5c
  - F: 6.29" / 16c
  - G: 6.95" / 17.7c
- > Glass
  - A: 6.42" / 16.3c
  - B: 6.95" / 17.7c
  - C: 3.03" / 7.7c
  - D: 3.55" / 9c
  - E: 4.9" / 12.5c
  - F: 6.42" / 16.3c
  - G: 6.95" / 17.7c

# profile

## Itron

Itron is a leading technology provider and critical source of knowledge to the global energy and water industries. More than 3,000 utilities worldwide rely on Itron technology to deliver the knowledge they require to optimize the delivery and use of energy and water. Itron delivers value to its clients by providing industry-leading solutions for electricity metering; meter data collection; energy information management; demand response; load forecasting, analysis and consulting services; distribution system design and optimization; web-based workforce automation; and enterprise and residential energy management.

**To know more, start here: [www.itron.com/global](http://www.itron.com/global)**



### **South America**

2818 North Sullivan Road  
Spokane Valley, Washington 99216  
U.S.A.  
Tel.: +1 509 891 3007 (English)  
Tel.: +1 800 624 5461 (U.S. only)  
Fax: +1 509 891 3061  
[support.sam@itron.com](mailto:support.sam@itron.com)  
Tel.: +1 509 891 3003 (Español)  
[soporte@itron.com](mailto:soporte@itron.com)

### **Corporate Headquarters**

2818 North Sullivan Road  
Spokane Valley, Washington 99216  
U.S.A.  
Tel.: +1 509 924 9900  
Fax: +1 509 891 3288  
[www.itron.com](http://www.itron.com)

### **Electricity Metering - U.S.**

313-B North Highway 11  
West Union, South Carolina 29696  
U.S.A.  
Tel.: +1 864 638 8300  
Fax: +1 864 638 4950