

features

Radio Frequency Personality Module

- > Fully factory programmed
- > Transmit frequency; spread spectrum 910-920 Mhz

Energy RF Transmission

- > Each RF transmission contains the unit ID number, unit type, energy usage, and tamper status, as well as the Cyclic Redundancy Check (CRC) to ensure message integrity.

Tamper Detection

The Itron patented method of tamper detection identifies:

- > Power removal tamper
- > Meter inversion tamper
- > Reverse disk rotation
- > Power outage count

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
- > EC 61000-4-2
- > FCC Part 15, Subclass C

Reference Information

- > CENTRON Technical Reference Guide
- > CENTRON C1S Specification Sheet
- > CENTRON C1SC Specification Sheet
- > CENTRON C1SD, T, L Specification Sheet
- > Price Bulletin 110
- > Hardware Specification Form
- > ZRO-C2A Handheld Resetter Operating Instructions

Product Availability

Volts & Service	Meter Class	Test Amps	Kh (Pulse/Wh)	Form No.	Register Description	Digits & Multipliers	Catalog with Glass	Catalog with Poly
120V 2-wire	100	15	1.0	1S	LCD	5 x 1	G980485	G980486
120V 2-wire	100	15	1.0	1S	LCD	4 x 10	G980499	G980500
240V 3-wire	200	30	1.0	2S	LCD	5 x 1	G980513	G980476
240V 3-wire	200	30	1.0	2S	LCD	4 x 10	G980514	G980477
240V 3-wire	320	50	1.0	2S	LCD	5 x 1	G980487	G980488
240V 3-wire	320	50	1.0	2S	LCD	4 x 10	G980501	G980502
120V 2-wire	20	2.5	1.0	3S	LCD	5 x 1	G980489	G980490
120V 2-wire	20	2.5	1.0	3S	LCD	4 x 10	G980503	G980504
120V3-wire	200	2.5	1.0	12S	LCD	5 x 1	G980495	G980496
240V 2-wire	20	2.5	1.0	3S	LCD	5 x 1	G980491	G980492
240V 2-wire	20	2.5	1.0	3S	LCD	4 x 10	G980505	G980506
240V 3-wire	20	2.5	1.0	4S	LCD	5 x 1	G980493	G980494
240V 3-wire	20	2.5	1.0	4S	LCD	4 x 10	G980507	G980508

Refer to the CENTRON Technical Reference Guide for the catalog numbers and burden data for the FM 1S CL100, FM 2S CL320, FM 3S CL20, FM 4S CL20, FM 12S CL200, and FM 25S CL 200 meters. All catalog numbers specify undetented energy setting with 7/1 segment check. Please refer to the CENTRON specification number bulletin for additional configurations.

specifications

Dimensions

Polycarbonate

A	B	C	D	E	F	G
6.29"	6.95"	2.7"	3.16"	4.53"	6.29"	6.95"
16 cm	17.7 cm	6.9 cm	8 cm	11.5 cm	16 cm	17.7 cm

Glass

A	B	C	D	E	F	G
6.42"	6.95"	3.03"	3.55"	4.9"	6.42"	6.95"
16.3 cm	17.7 cm	7.7 cm	9 cm	12.5 cm	16.3 cm	17.7 cm

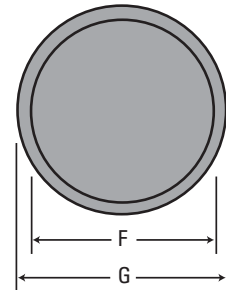
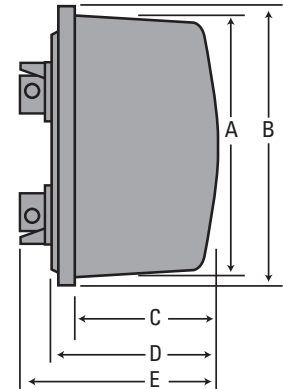
Shipping Weights

Polycarbonate

4 Meter Cartons	Approx. 8.9 lbs.	4.04 kg
96 Meter Pallets	Approx. 214 lbs.	97.30 kg

Glass

4 Meter Cartons	Approx. 13.96 lbs.	6.35 kg
96 Meter Pallets	Approx. 335 lbs.	152.30 kg



Specifications

Power Requirements

Voltage Rating: 240 V, 120 V	Operating Voltage: $\pm 20\%$ (60 Hz), $\pm 10\%$ (50 Hz)
Frequency: 60 Hz (50 Hz)	Operating Range: ± 3 Hz

Transmitter Frequency

910-920 MHz Frequency Hopping

Operating Environment

Temperature: -40° to $+85^{\circ}\text{C}$
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: 1.79	VA: 7.45
Current Coil-Self Contained Test Amp Current: 60 Hz		
Service: 3-Wire	Test Current (Amps): 30	VA: <0.50

profile

Itron Inc.

Itron is a leading technology provider and critical source of knowledge to the global energy and water industries. Nearly 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.

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