

RSM-5c

Commercial Digital Electric Meter



Specifications:

- 6.9"H x 9.8"W x 4.9"D
- Single or 3-Phase
- kWh or kWh and Demand
- 120/208V, 277/480V and 480V DELTA
- 100-800 AMPS

Remote Data Transfer Through Power Line Communications Technology

- Solution for Commercial or Industrial Applications
- Interval Data & Time of Use Capability
- Load Profiling
- Collects Data From Water & Gas Meters
- Easy to Install with mounting provisions
- Revenue-grade accuracy
- UL, UL-C

For over 25 years, Quadlogic has been using a patented Power Line Communications technology to transmit meter data over buildings' existing power lines. No additional wiring or meter readers are required. Leading property management companies all over the world depend on Quadlogic systems to provide reliable and accurate electric meter readings. Quadlogic meters provide all the data you need to bill tenants, allocate energy costs and make smart energy decisions.

Features

Integrated Power Line Communications

Utilizes existing electrical wiring for communications
Requires no dedicated hard wires, additional modules or attachments for communications

Flexible Data Programming

Interval data down to 5 minutes allows flexible load profiling and Time of Use billing options

Accurate

Meets ANSI C12.1 specifications

Comprehensive Information

Event reporting with date and time stamps regarding power consumption, demand resets, power ups and power downs, time changes, and tampers

Liquid Crystal Display

Back-light LCD with push-button scroll

Multi-utility Submetering System

Integrates and stores pulse data from gas and water meters

Power Quality Data

Measures four-quadrant energy to analyze power quality

Tamper Resistant

Rugged steel enclosure with pad lock hasp

Data Integrity

Utilizes non-volatile flash memory for accurate data storage and integrity without battery reliance

Installation Verification

Display allows on-site verification of proper installation

Manufacturer's Warranty

Three year meter warranty

Easy Access To Data

Software package available for on or off-site meter reading



RSM-5c Technical Specifications



Metering Specifications

Metered Voltage: 120, 220, 240, 277, 380, 480, Delta or Wye, 50/60 Hz

Current Input: 0.1 Amp and CL10 (5 amp input)

secondary inputs - 100 Amp to 800 Amp primary available

Consumption & Demand Data: kWh models: kilowatt-hour consumption register

Demand models: kilowatt-hour consumption register

Peak demand with date and time stamp

Local and remote demand reset

15-minute data logging (intervals)

Factory programmable time-of-use / time-of-day ("TOU" "TOD")

Four quadrant delivered and received: kW, kVARLeading, kVARLagging, & kVA

Volts-squared hours & amp-squared hours

Programmable interval data & peak demand: 5 min to hourly window

Block or rolling block demand

Meter total and/or by phase

Real time per phase: Voltage, current, phase angle, power factor, THD, watts, VARs, VA and frequency

Standards

Meets ANSI C12.1

UL, UL-C File E204142

IEC Optical Communication Interface (Standard Feature)

RSM5c approved by California Div. Of Measurement Standards and Maryland Public Service Commission

Additional Features

Pulse Datalogger: Up to 4 Form A dry contact pulse inputs for water, BTU, gas, other

Specifications: Max. Distance: 300 feet from external pulse meter to RSM-5 (18 gauge min.)

Min. Pulse Width: Power on: 50 msec, Power off: 500 msec

When the RSM-5 loses power, the pulse accumulator still has the capability to record pulses but the sample rate is reduced.

Max. Pulse Rate: Power on: 10 pulses/sec max, Power off: 1 pulse/sec max

Peak voltage: 5.5V, Peak current: not applicable

Isolation: 2.5kV isolation between pulse output and AC line

Max. signal debounce tolerance: 20 msec

Demand Reset: Allows local reset of peak demand register

Data Integration Options: IQ Software

MV-90 TIM module

ASCII-based, open-data protocol

Open-source data conversion program

Communications Options

Power Line Communications (standard feature)

IEC optical probe

19.2K internal modem

Modbus RTU protocol (2-wire RS-485)

Accuracy

$\pm 0.5\%$ @ unity and 50% power factor; 1-100% of full-scale (excluding external CT error) (ANSI approved)

Liquid Crystal Display

Push button scroll

32 digit liquid crystal display (16 digit x 2 rows)

6 whole digit consumption register

Data digit height: 0.31"

Programmable display scroll & decimal place display

Operating Range

Voltage: Rated Voltage 90% to 110%

Usage: For indoor use only

Temperature: -20°C to +60°C

Enclosure: NEMA 1 rated (Outdoor NEMA 4X optional)

Humidity: 0 to 95% R.H. (non-condensing)

Pollution Degree: 2

Transient/Surge Suppression: ANSI C37.90.1-1989

Maximum Altitude: 2000 meters

Memory

512 kbyte non-volatile flash memory retains daily and interval data

During power outage:

- Flash memory retains daily and interval data

- Long-life lithium battery maintains time, logs incoming pulses and retains data acquired within the incompleting interval at the time of the outage

Weight & Dimensions

Enclosure: 6.9"H x 9.8"W x 4.9"D

Weight: 6.6 lbs

For Installation Guide visit
www.quadlogic.com

QUADLOGIC

RSM-5c_R1.2.R

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