

# RSM-5 Technical Specifications



## Metering Specifications

**Metered Voltage:** 120, 220, 240, 277, 347, 380, 480, 600, Delta or Wye, 50/60 Hz

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

secondary inputs - 50 Amp to 4,000 Amp primary available

**Four quadrant Consumption & Demand:** 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

**Time of Use:** Up to 16 blocks per day available for all metering parameters

**Meets ANSI C12.1 and C12.16**

**UL, UL-C File E204142**

**IEC Optical Communication Interface (Standard Feature)**

## 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

RS-232 serial port

Network data link (4-wire RS-485)

Modbus RTU protocol (2-wire RS-485)

## Accuracy

± 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%)

Temperature: -20°C to +60°C

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

Transient/Surge Suppression: ANSI C37.90.1-1989

## 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

## Shipping Weight & Dimensions

1 RSM-5: 9.0 lbs

Enclosure: 13.5"H x 8.5"W x 4.5"D (RSM-5 Kit Weight: 29.1-31.3 lbs)

For Installation Guide visit  
[www.quadlogic.com](http://www.quadlogic.com)