



## Features:

- Liquid crystal display
- Satisfies new arc-flash safety requirements
- Optional steel enclosure for added protection from weather elements and vandalism
- 5-year warranty
- Made in the USA

The RM-1000 is a motor monitoring device to be used in conjunction with SymCom's 77C and 777 family of overload relays/power monitors (except the 777-P1) and SymCom's model 601 voltage monitor. The RM-1000/777 motor management system combines unsurpassed electronic motor protection and critical, user-friendly motor monitoring.

The RM-1000 can monitor and control up to (16) 777 Plus Series units through an RS-485 network using Modbus RTU protocol. A second communication port allows monitoring and control from a computer, PLC, DCS or SCADA system. Up to (99) 777 Plus Series units can be accessed from the host computer or PLC with the RM-1000 acting as a repeater for any of its motor protectors.

The RM-1000 is environmentally protected and can easily be mounted on the front of a panel or motor control center. The water resistant enclosure and keypad assembly is also resistant to damage from ultraviolet light. All variations of the RM-1000 have a wide operating temperature range of -40° to 70°C (-40° to 158°F). The RM-1000 is manufactured in one of three different enclosure ratings. The standard RM-1000 carries a NEMA-3R and UL type 12 rating. The RM-1000-3R has small weep holes in the bottom and only carries a NEMA-3R rating. It is ideal for applications where there is potential for condensing moisture. The RM-1000 NEMA 4 carries a NEMA 4X rating.

The RM-1000 has the following display and control capabilities for up to 16 attached motor or pump protectors:

### Displays:

- Individual line currents and average current
- Current unbalance
- Individual line-line voltages and average voltage
- Voltage unbalance
- Present fault trip reason and restart timer status
- Last four faults
- 777 Plus Series' setpoints
- Run hours on each motor
- Warning of pending (imminent) faults

### Controls:

- Change setpoints
- Reset run-hour meter
- Reset the 777 Plus Series' relay
- Clear last fault in the 777 Plus Series

## AUXILIARY PRODUCTS:

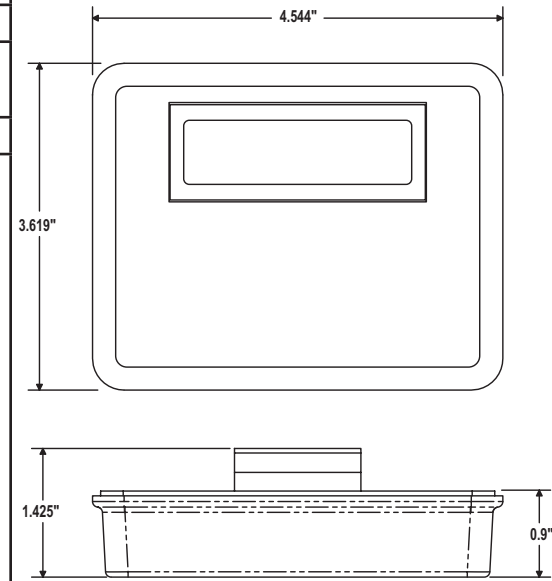
- Steel enclosure (RM-1000-ENCL)
- 777 Plus Series overload relays/power monitors
- Communication Modules



# Specifications

Functional Characteristics	
Communications Baud Rate Protocol Serial Interface Range	1200-19200 Modbus RTU RS-485 50 ft., 4000 ft. with separate isolated power supply
Input Characteristics	
Nominal Power Supply Voltage Rating Max Current	12-24VAC or VDC (isolated power source with maximum 4A overcurrent protection) 100mA
General Characteristics	
Ambient Operating Temperature Protection Class RM-1000 RM-1000-3R RM-1000 NEMA 4 Relative Humidity Terminal Torque Standards Passed Electrostatic Discharge (ESD) Electromagnetic Field Fast Transient Burst Surge  Conducted RF Voltage Dips & Interruptions Safety Marks UL listed CE Dimensions Weight Material UV Exposure w/o degradation Keypad Mechanical Lifetime Keypad Material Panel Thickness	-20° to 70° C (-4° to 158° F)  NEMA 3R/UL Type 12 NEMA 3R NEMA 4X 85% non-condensing Depluggable, 3 in.-lbs.  IEC 61000-4-2, Level 3, 6kV contact, 8kV air discharge IEC 61000-4-3, Level 3, 10V/m IEC 61000-4-4, Level 4+, 4kV on cable clamp IEC 61000-4-5, 24V supply, Level 1 (+500V), RS-485 & reset lines, Level 2 (+1kV) IEC 61000-4-6, Level 3+ (30 Vrms) SEMI F47  UL508 IEC 60947-1, IEC 1131-2 4.5" H x 3.2" W x 0.9" D 6 oz. Polycarbonate 2000 hrs. 200,000 cycles Polyester 0.03" min.

## Enclosure Dimensions



### How to order:

Part Number: RM-1000  
RM-1000-3R  
RM-1000 NEMA 4

