

# MRT RATE METER, TOTALIZER & BATCHER



Flow  
Pressure  
Level  
Temperature  
measurement  
monitoring  
control



- Display Rate or Total
- Batching Version Available
- 2 Presets for Rate or Total
- Fully Scalable
- Analog or Serial Communications
- NEMA 4X Front Panel
- Pulse Input to 10 kHz

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Model:  
MRT



**Features**

- Display Rate or Total
- Batching Version Available
- 2 Presets for Rate or Total
- Fully Scalable
- Analog or Serial Communications
- NEMA 4X Front Panel
- Pulse Input to 10 kHz

Kobold's MRT series of controllers offers users a full range of frequency input control options. Through use of full scalability and two internal set-point relays, a wide range of totalizing and rate metering/control applications may be realized. A specialized batching version is available for use in automated fill or other metering tasks.

The batching unit offers one available batch value (front panel programmable) with one "pre-warn" value. Start/Stop functions are accessed manually from either the front panel, or electronically via the rear terminal strip. Rate metering capability is standard on all batchers.

All units feature a six digit LED display for indication of count (total) and/or five digit rate. Two count input channels (A and B) are featured on the totalizing units. Channel A serves double duty as the rate input. The totalizing display can be programmed to show sum (A+B) or net (A-B) values.

**Ordering Information**

MRT-	W = Function	X = Operating Voltage	Y = Count Input	Z = Output
	W = 1 Rate & Total	X = 1 220 VAC	Y = 3 Standard High Impedance 4-30 VDC 9.99 kHz max.	Z = 0 None
	W = 2 Total Only	X = 5 110 VAC	Y = 4 Mag. Input 30 mV min.	Z = 1 RS-232 interface
	W = 4 Batching		Y = 5 Single Count with up/down input Y = 9 Quadrature 4-30 VDC 9.99 kHz max.	Z = 2 RS-422 interface Z = 3 0(4)-20 mA

**To Order:** Choose one option from each of the columns titled »W, X, Y and Z«. Then assemble the part number by substituting your chosen options' number value in the part number as: MRT-WXYZ.

**Example:** A rate meter and totalizer (W = 1), 110 VAC (X = 5), standard input (Y = 3), and 0(4)-20 mA output (Z = 3), would be ordered as an MRT-1533.



Input/Output options include standard as well as direction indicating inputs, a quadrature input feature, RS-232, RS-422, and 0(4)-20 mA communications protocols.

**Specifications**

- Display**  
**Displayed Values:** Rate, Total, Batch  
**Display Type:** 0.55" Red LED  
 5 digit Rate  
 6 digit Total  
 6 digit Batch
- Power**  
**Input:** 110 VAC, 220 VAC  
 12 VDC  
 250 mA maximum  
 or 6.5 VA maximum  
**Excitation:** 12 VDC @ 50 mA  
 (AC units only)
- Inputs:**  
 1 rate/count input  
 1 count only input  
 1 reset input
- Level:**  
 Low: 0-1 VDC  
 High: 4-30 VDC
- Frequency Range:** 0-10 kHz
- Impedance:** 10 kohm
- Outputs:**  
 2 N/O relays, 10 A @ 240VAC/28VDC and  
 0(4)-20 mA or  
 RS-232 port or  
 RS-422 port

**Environmental**

- Operating Temp.:** + 32 °F to + 130 °F
- Storage Temp.:** - 40 °F to + 200 °F
- Housing:** NEMA 4X front panel  
NEMA 1 case

Subject to change without prior notice.