

# RED-Y COMPACT SERIES

Thermal Mass Flow Meters with Battery Power or External Supply



The Red-y Compact Series thermal mass flow meters are an affordable and highly accurate replacement for rotameters. Available with battery power or 24VDC power, these meters can be installed in any orientation in remote areas. Battery life is about 2 years. The Compact Series is available with an integral manual control valve or configurable relay switch. The Red-y Compact Series is available with flow ranges from 1 SCCM up to 300 SLPM. A totalizer function is also available. Thanks to the Compact's modular design, suitability for mounting in any position, exceptional ease of cleaning (without requiring recalibration), and innovative CMOS sensor technology, the flow meters of the Red-y family are extremely attractive for a wide range of gas flow applications. The Compact Series offer a clear and accurate indication of flow that is insensitive to pressure and temperature changes.

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>Battery power or 24 VDC</li> <li>CMOS sensor technology</li> <li>Insensitive to pressure &amp; temperature changes</li> <li>High accuracy and turndown ratio</li> <li>No moving parts</li> <li>About two years of battery life</li> <li>Local display of actual flow rate</li> <li>3-year warranty (except battery)</li> <li>No minimum straight inlet length required</li> </ul>	<ul style="list-style-type: none"> <li>Analyzers</li> <li>Surface coating equipment</li> <li>Semiconductor production equipment</li> <li>Welding equipment</li> <li>Lasers</li> <li>Furnaces</li> <li>Fuel cells</li> <li>Machinery manufacturing</li> <li>Gas distribution systems</li> <li>Compressed air systems</li> <li>Laboratory use</li> </ul>

DIMENSIONS	Measurements (in.)	A	B	C	D	E
	Compact meter 1/4"	4.49	3.50	1.73	1.73	0.98
	Compact meter 1/2"	6.30	3.50	2.13	2.13	1.38
	Compact regulator 1/4"	4.49	3.50	1.73	1.73	0.98
	Compact switch 1/4"	4.49	3.50	1.73	1.73	0.98
	Switch 1/2"	6.30	3.50	2.13	2.13	1.38
	Compact all-in 1/4"	4.49	3.50	1.73	1.73	0.98

Thermal Mass Flow  
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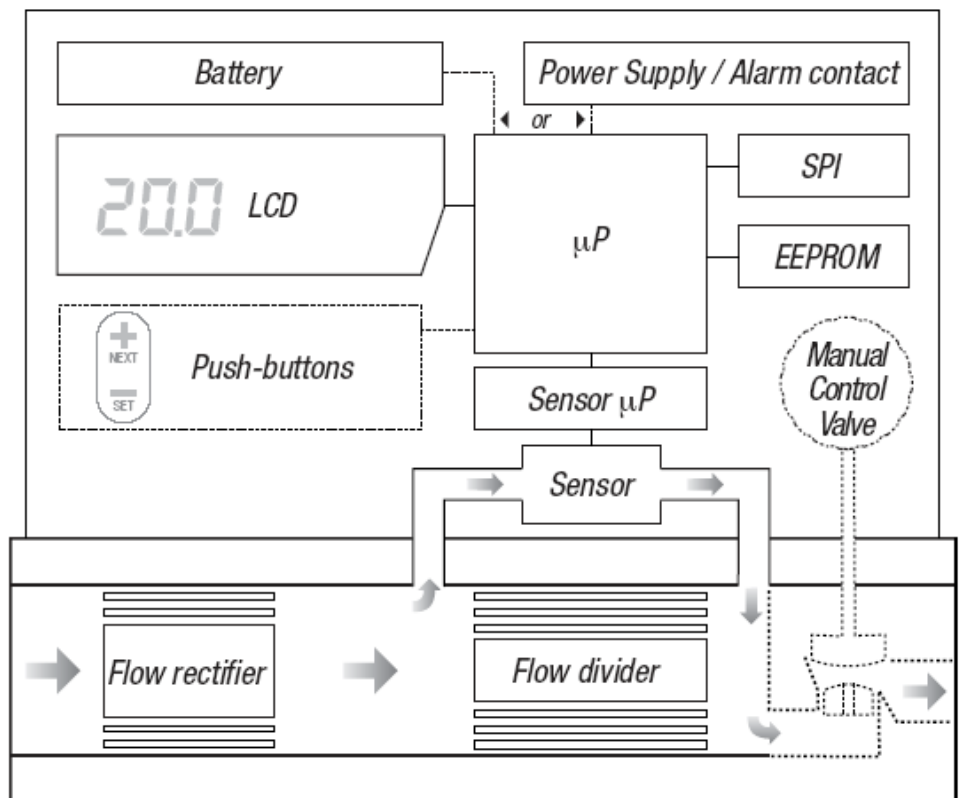
**THERMAL MASS FLOW™**  
 A Monkey Industrial Supply Company

## SPECIFICATIONS

Media	Air, O <sub>2</sub> , N <sub>2</sub> , He, Ar, CO <sub>2</sub> , H <sub>2</sub> , CH <sub>4</sub> , C <sub>3</sub> H <sub>8</sub> , N <sub>2</sub> O, SF <sub>6</sub> , C <sub>3</sub> H <sub>6</sub> , CO, C <sub>4</sub> H <sub>10</sub> , other gases available upon request
Accuracy	±1% of full scale
Turndown ratio	1:50
Response time	500 ms
Pressure	145 psig
Temperature	0 – 50°C (32 – 122°F)
Power supply	Lithium battery (lifetime about 2 years) - Optional: External supply 24VDC ±10%
Materials	Aluminum or stainless steel
Seals	FKM, optional EPDM
Process Connection	Up to 50 SLPM: ¼" Up to 300 SLPM: ½"
Warranty	3 years (except battery)



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The digital intelligence linked with the CMOS sensor permits the display of a fully calibrated, temperature-compensated reading. The CMOS sensor 'intelligence' integrated onto the chip thus facilitates an extremely simple processing of the measurement data. CMOS is a standard technology for the manufacture of integrated circuits.

CMOS chips are generally known as 'semi-conductor chips', 'silicon chips' or 'computer chips'. They are widely used in PCs, mobile telephones and many other information technology devices.

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# RED-Y COMPACT PRODUCT CODES



## RED-Y COMPACT SERIES

When ordering, specify gas type, flow rate, inlet/outlet pressure, and temperature.

For example: 650 SCCM Helium, 30 psig inlet, 5 psig outlet, 30° C (86° F).

Basic task

G gasflow

Series

C compact series

Function

M Meter  
R Regulator  
S Switch  
A All-in

Maximum Flow Rate (Air)

A9 < 500 SCCM 1/4" NPT, 1/4" OD tube, G1/4"  
B9 500-5000 SCCM  
C9 0.5-50 SLPM  
D9 50-200 SLPM 1/2" NPT, 1/2" OD tube, G1/2"

Class

S Standard (+/-1% of full scale, 1:50)  
K Customer specific

Materials Body and seals

A Aluminum, FKM\*  
B Aluminum, EPDM  
S Stainless Steel, FKM\*  
T Stainless Steel, EPDM  
K Customer Specific

Power Supply

B Battery  
P Battery, Totalizer  
F External Supply 24 V, Santard  
T External Supply 24 V, Totalizer  
K Customer Specific

Materials Valve (Regulator and All-in)

A Nickelized Brass, FKM  
B Nickelized Brass, EPDM  
S Stainless Steel, FKM  
T Stainless Steel, EPDM  
K Customer Specific  
N No Valve

Valve Automatic Valve for controller (sized by manufacturer)

88 Valve size unspecified  
00 No valve

Code G C M - B9 S A - B A 00

\* = Standard

## TERMS AND CONDITIONS

### PAYMENTS AND TERMS

Prices quoted are good for 30 days unless otherwise noted. Thermal Mass Flow accepts cash, check, wire transfer, or credit cards. All prices are quote in US Dollars, unless otherwise noted. All sales are final. Standard shipping is \$10 USD per meter. All goods remain the property of Thermal Mass Flow until paid in full. Payment is due at time of order unless credit has been granted. All past due accounts accrue a service fee of 3% per month. Thermal Mass Flow is a DBA of Komodo Enterprises, Inc., a Nevada Corporation.

### PRIVACY STATEMENT

Komodo Enterprises Inc. respects your privacy and will not divulge your contact information to any third party organization or entity without your express permission. In addition, our web sites gather no unauthorized information from your computer during your visit with us. All phone calls to Thermal Mass Flow may be monitored or recorded.

### ACCURACY

Thermal Mass Flow assumes no responsibility for errors or omissions in this web site or documents which are referenced by or linked to this site. This site could include technical or other inaccuracies. Changes are periodically added to the information, and Thermal Mass Flow may change the products or services described at any time. Contact Customer Service for further information before relying on any information contained herein. The information provided on this site, including text, images, and links, are provided "AS IS" by Thermal Mass Flow solely as a convenience to its visitors. This information is without any warranties, express or implied, including but not limited to warranties of merchantability, fitness for a particular purpose or non-infringement.

### WARRANTY AND INDEMNITY

Thermal Mass Flow warrants products it manufactures for a period of 90 days to the original purchaser from the date of purchase. Items not manufactured by Thermal Mass Flow are limited to their own manufacturer's warranties. This warranty does not apply to defects due directly or indirectly to misuse, negligence, accidents, abuse, repairs, or alterations or lack of maintenance. This is Thermal Mass Flow's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. Thermal Mass Flow does not warrant or represent that the merchandise complies with the provisions of any law or acts. In no event shall Thermal Mass Flow liability under this warranty exceed the purchase price paid for the product. Both parties agree to binding arbitration in Las Vegas, Nevada. Thermal Mass Flow shall in no event be liable for death, injuries to persons or property or for incidental, and contingent, special, or consequential damages arising from the use of our products. Thermal Mass Flow warrants products only for the specific use expressly agreed to at time of purchase by Thermal Mass Flow in writing. All claims, including claims covered under the limited warranty, are subject to inspection and investigation before Buyer's claim is settled. Any parts returned for warranty or repair will not be accepted without an RMA number and must be shipped pre-paid. Contact Customer Service with the original bill of sale to obtain an RMA number. CMOSens is a trademark of Sensinirion AG.

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