



## RIO™ M Series Specifications

The RIO M Series produces Mixed Oxidant Solution (MOS) chemistry for water disinfection and is systematically optimized for ease of use, reliability, and performance. The RIO has a modular design which means the system can be easily expanded 5X within the same cabinet and without increasing the footprint, to meet future increase in FAC demand. Leading the industry in salt and energy conversion, the RIO can ensure the lowest life-cycle cost for your application. The unit operates with Allen Bradley MicroLogix 1400 controls and is equipped with self-cleaning and self-adjusting flow control making the system virtually maintenance free.

	RIO M1	RIO M2	RIO M3	RIO M4	RIO M5
Rated FAC Capacity	60 lbs/day 27 kg/day	120 lbs/day 54 kg/day	180 lbs/day 81 kg/day	240 lbs/day 108 kg/day	300 lbs/day 135 kg/day
Salt Conversion (SCE)*	2.5 lb salt/lb FAC 2.5 kg salt/kg FAC				
Energy Conversion (ECE)*	3.5 kW-hr/lb FAC 7.7 kW-hr/kg FAC				
FAC Concentration*	4,500 mg/L (+/- 1,000)				
Flow Rate^	75 gph 284 lph	150 gph 568 lph	225 gph 852 lph	300 gph 1136 lph	375 gph 1420 lph
Nominal Energy to Unit	480 V: 13 A 400 V: 16 A 11 KVA	480 V: 26 A 400 V: 33 A 22 KVA	480 V: 39 A 400 V: 49 A 33 KVA	480 V: 52 A 400 V: 65 A 44 KVA	480 V: 65 A 400 V: 81 A 55 KVA
Electrical Service Requirement (OSG Only)	480 VAC, 3 ph, 100 A, 50/60 hertz 400 VAC, 3 ph, 125 A, 50/60 hertz				
Air Temp. Required	45° to 115° F 7° to 46° C				45° to 105° F 7° to 40° C
Recommended Feed Water Temperature*	55° to 80° F 12° to 27° C				
Allowable Feed Water Temperature*	40° to 95° F 5° to 35° C				
Feed Water Pressure	35 to 100 psi 241 to 689 kPa				
Water Hardness	0 – 17 mg/L (1 grain/gallon)				
Maximum Silica Limit	20 mg/L				
Energy Add for Internal Vent	2.8 kW	5.6 kW	8.4 kW	11.2 kW	14kW
Approximate Dimensions (WxDxH)	61.9 x 37.8 x 68.8 inches 157.23 x 96.01 x 174.75 cm				
Self Cleaning	YES				

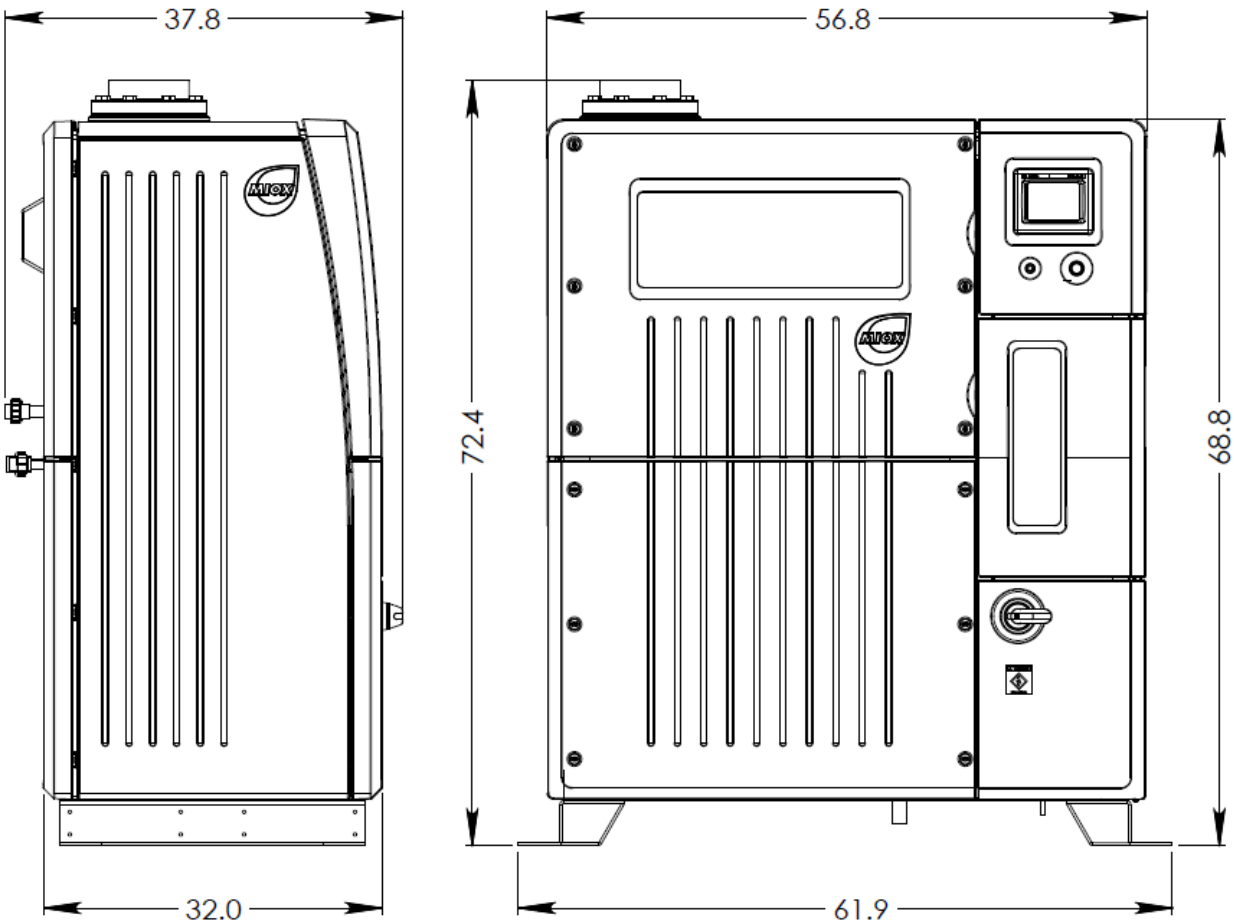
\*Performance may vary depending on salt quality, water quality, and water temperature.

^Feed water flow rate is subject to +/- 15% variation

**Note: This electronic document is controlled. Once this document is printed it becomes uncontrolled and obsolete. Refer only to electronic document for the latest information.**



## RIO Drawing



REFERENCE GENERAL ARRANGEMENT DRAWING 112-00023  
FOR INSTALLATION REQUIREMENTS

**Note: This electronic document is controlled. Once this document is printed it becomes uncontrolled and obsolete. Refer only to electronic document for the latest information.**

