

# MegaTronMR

## REVERSE OSMOSIS CONTROLLER

The MegaTron MR offers the widest range of features combined with WebAdvantage remote communications making it an exceptional choice for commercial and industrial reverse osmosis systems.



### KEY FEATURES

- WebAdvantage Web Monitoring and Reporting Built-In
- Up to 12 Customizable Digital Inputs
- Up to 32 Customizable Analog Inputs
- Up to 9 Totalizing Flow Inputs
- Customizable Graphics
- Customizable Calculations
- Multiple Flush Activation Logic
- Multiple RO Activation Logic
- Total Run Time Alarming
- Notepad Manually Entered History
- Bacnet and Modbus Options
- UL 508 Panel Shop Customizations

### PRODUCT OVERVIEW

The MegaTron MR commercial and industrial RO controller is the industry leading purpose built unit combining the widest range of inputs and outputs with a customizable touch screen and web based, Bacnet and Modbus monitoring and reporting.

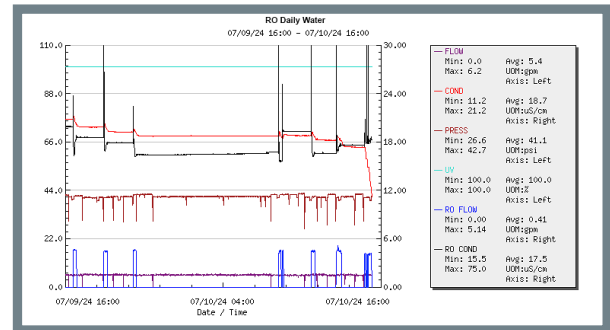
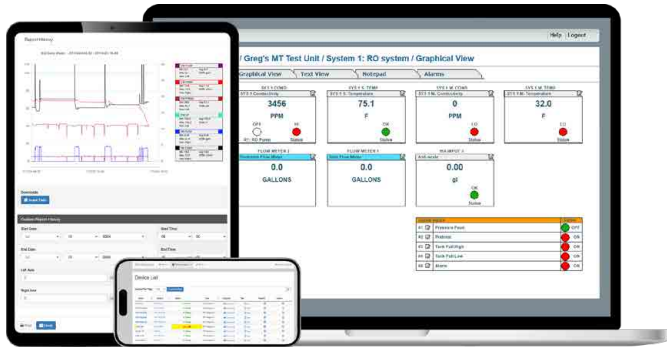
Advantage Controls can package a MegaTron MR with motor controls, variable speed drives and much more to meet large or small applications in our UL 508 panel shop.

The MegaTron MR can be configured to monitor and control every aspect and reading of your RO system. Your dealers can use WebAdvantage for remote access, alarming, and reporting to take their ability to address customer's needs to the next level.

# WEBADVANTAGE

WebAdvantage is a cloud based monitoring, alarming and reporting service to keep in constant contact with your RO system via an internet connected MegaTron MR controller.

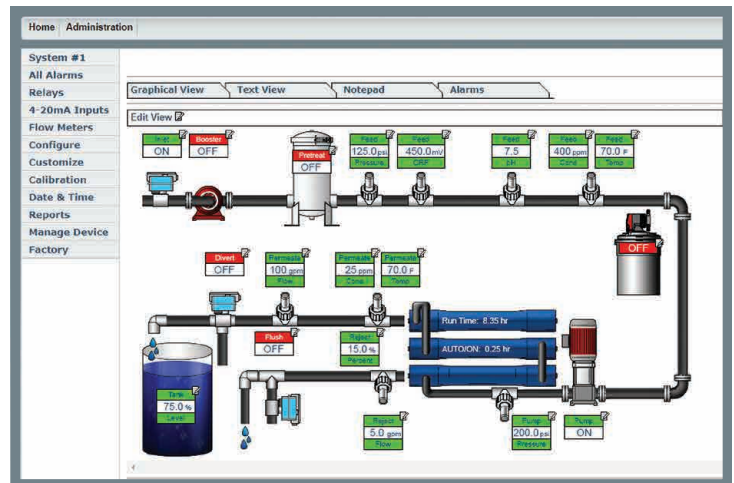
A single login lets you access all our your controllers from any web connected device. Check live conditions, make setting changes, manage automatic reporting without spending valuable time and money driving to the site.



## KEY FEATURES

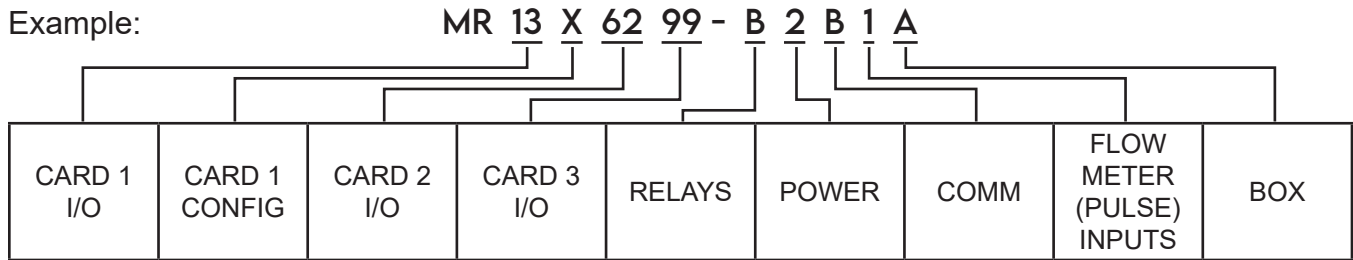
- Real-Time Process Connection
- Custom Graphing and Reporting
- No Ongoing Use Charges
- Historical Data Storage
- Back-Up Server Assurance
- Client Access Management
- Daily Summary Reporting
- Alarm and Escalation Notification
- Device Management
- Cell Plan Management
- Private Label Logo Capable

Alarm emails and historical reports can be customized with your company logo branding and automatically sent to everyone you want. Report templates can include all sensor history, water usage, relay, alarm activity and more to provide unique insights and regulatory compliance proof of a system's performance.



# MODEL MATRIX

Example:



**Note:** A selection must be made for each model number space above.

CARD 1 I/O	
11	6 digital inputs only
12	Permeate cond/temp no probe
13	Perm & feed cond/temp no probes
14	Permeate cond/temp with probe
15	Perm & feed with probes
17	Concentrate conductivity/temp with probe
22	Perm cond/temp & pH no probes
23	Perm & feed plus pH no probes
24	Perm & feed cond w/ probes + pH no probe
27	Two non permeate conductives w/probes
32	Perm cond/temp & ORP no probes
33	Perm & feed plus ORP no probes
34	Perm & feed cond w/ probes + ORP no probe
42	Perm cond, pH & ORP no probes
43	Perm & feed, pH & ORP no probes
44	Perm & feed w/ probes + pH & ORP, no probes
52	pH & ORP no cond or probe

CARD 1 CONFIGURATION	
A	RO, Inlet, Flush
B	RO, Inlet, Flush, Divert
C	RO, Inlet, Flush, Boost
D	RO, Inlet, Flush, Divert, Boost

CARD 2 & 3 I/O (Card 2 can include card 1 options plus ...)	
99	No card
61	(4) mA outputs*
62	(4) mA inputs*
63	(8) mA outputs*
64	(8) mA inputs*
65	(4) mA inputs and outputs*

\*Note: Option 61, 63, and 65 cannot be used on card 3 if option 61, 63, or 65 have been used on card 2.

RELAYS (2.5 amp each) E & F use large carrier board	
A	(5) 120-240 VAC, no din rail wiring
B	(5) with din rail connectors wired
C	(10) 120-240 VAC, no din rail wiring
D	(10) with din rail connectors wired
E	(15) 120-240 VAC, no din rail wiring †
F	(15) with din rail connectors wired †

POWER	
1	120 VAC incoming power
2	120 VAC, UL, CSA, CE labeling
3	240 VAC incoming power
4	240 VAC, UL, CSA, CE labeling

COMMUNICATIONS	
A	WebAdvantage ability, no admin rights
B	WebAdvantage with administration rights**
C	WebAdvantage no rights & Bacnet TCP/IP
D	WebAdvantage with rights & Bacnet TCP/IP**
E	WebAdvantage no rights & Modbus TCP/IP
F	WebAdv with rights & Modbus TCP/IP**

FLOW METER (PULSE) INPUTS	
1	No inputs
5	(5) inputs
X	(10) inputs †requires larger carrier board

BOX	
A	14" x 12" x 8" poly
B	16" x 14" x 8" poly
C	18" x 16" x 10" poly
D	12" x 10" x 6" poly (relay option A or B req.)
X	Box defined in motor control

\*\*Note: Option B, D or F are required to obtain free WebAdvantage access and administrative rights to the controller. Internet connectivity must be obtained / provided separately and involve cost.

# SPECIFICATIONS

<b>Electrical Input</b>	95-240 VAC, 50/60 Hz
<b>Relay Outputs</b>	Powered relay outputs same as incoming power individually fused and 2.5 amps. Dry contact relays pass through current is limited to 2.5mA at 28 VDC.
<b>Display</b>	6.875" Diagonal LCD Touch Screen
<b>Digital Inputs</b>	From open collector/open drain output or a dry contact. Inputs have 10K $\Omega$ pullup to 3.3 VDC.
<b>Flow Totalizing Inputs</b>	From open collector/open drain output or dry contact. Inputs use 10K $\Omega$ pullup to 5 VDC with a max input rate of 2.5 KHz.
<b>mA Inputs</b>	Optical isolation, 250 $\Omega$ / 5 VDC @ 20 mA. Loop voltage to not exceed 30 VDC.
<b>mA Outputs</b>	With non-isolated 12 VDC power from unit max load = 400 $\Omega$ . With isolated external 24 VDC power supply, max load = 800 $\Omega$ .
<b>Ethernet</b>	DHCP or static capable with 10/100, WiFi 802.11 (b/g/n)
<b>Agency Approvals</b>	UL, CSA, CE
<b>Enclosure</b>	Heavy duty NEMA 4X polycarbonate, gasketed cover
<b>Ambient Temperature</b>	0° to 125°F (-17° to 52°C)
<b>Shipping Weight</b>	Approximately 10 lbs. (4.536 kg). Box selection will change shipping weight
<b>Dimensions</b>	See "Box" options on previous page

## MOTOR CONTACTORS

- DP120-20-R1 = 120 VAC 20 amp fused contactor wired to relay 1 for RO pump
- DP230-20-R1 = 230 VAC 20 amp fused contactor wired to relay 1 for RO pump
- DP120-20-R3 = 120 VAC 20 amp fused contactor wired to relay for boost
- DP230-20-R3 = 230 VAC 20 amp fused contactor wired to relay for boost
- MS120-20-R1 = 120 VAC 15-20 amp manual motor starter and contactor installed wired to relay 1 with starter alarm wired to digital input 5
- MS230-20-R1 = 230 VAC 15-20 amp manual motor starter and contactor installed wired to relay 1 with starter alarm wired to digital input 5

For additional motor control options use enclosure option X and define contacts and other power options in the Motor Controls selection guide.

## CELL ROUTER

Make connecting your MR to the internet easy with the CellAdvantage cell router from Advantage Controls.



## MICROLINX METERING PUMPS

Series L pumps have user selectable operation modes that include:

- Manual
- Pulse input
- 28-Day timer
- 4-20 mA input
- Pulse timer
- Recycle timer



Series M pumps provide affordable metering with deluxe features:

- Manual speed knob output control
- 200:1 turndown
- Stroke and power LEDs
- Clear cover



## SENSORS

Advantage Controls can help you with a wide range of sensor needs:

- pH and ORP
- Conductivity
- Pressure
- Temperature
- Free Chlorine
- Turbidity
- Flow



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