

# MegaTron Controller

## Microprocessor Control of:

- Conductivity
- pH
- ORP
- Chemical Feed
- Biocide Control



## Key Features

- Customizable Display
- Full Graphic LCD Display
- Multiple System Capability
- Simple ATM Style Menu
- One Point Calibration
- Assignable Relays
- Relay Test Keys
- Non-Volatile Memory
- Multi-Level Security Code
- 2 Year Replacement Warranty
- On Board History Graphs
- Remote Communications Option

## Application

The MegaTron series combines a simple ATM style menu with a large 16 line full graphic LCD display plus a wide range of options to make the most user friendly water treatment controller available.

Units can be configured to control conductivity, pH, ORP and temperature plus selectable feed timers and digital inputs. Relay activation and names plus many other features are field selectable.

MegaTron units can control single or multiple cooling towers and or boiler systems with the most customization flexibility available.

# Build a Model

MegaTrons can be single or dual **system** units. The model number will start with **MG** followed by the code for each function needed for the first system. (i.e. **MGCPF3E**).

If building a dual system, put a - after the functions for system 1 and list the functions for system 2. (i.e. **MGCPF3E-BF2**). If system two is the same as system 1, just put **-X2** (i.e. **MGCPF3E-X2**)

After the main control functions have been selected, insert another - and list the desired common options. (i.e. **MGCPF3-CF3E-H1KY**)

## Conductivity Control (1 per system / 2 max)

**C** = TE-4A Standard Tower probe  
**B** = BE-4B Standard Boiler probe

## PH Control (1 per system / 2 max)

**P** = TPE-21 Standard Tower probe

## ORP Control (1 per system / 2 max)

**R** = TOE-21 Standard ORP probe

## Temperature

(2 max / system – Each conductivity uses up one)

**T** = TC-1 Standard temp probe

## Feed Timers (max of 5 per system)

**F1** to **F5** (F4 = Four feed timers)

## Flow Switch

**E** = Flow Switch

## Low Drum Level Alarms (max 5 per system)

**L1** to **L5** (L4= four low level connections)

## OPTIONS

**A** - Conduit connection  
**D** - Dry Contact relays (D or D2 ) two max  
**H1** - Internet Connect Communications  
**J** - Additionl System Expansion Bus  
**K** - Additional control relays (K, K2, K3 ....)  
**O** - 4-20mA Outputs (O, O2, O3...)  
**V** - 5 volt d.c. output with water meter wire  
**Y** - Agency Approval (ETL, US&C)

## NOTES:

1. Feed timers are selectable (pulse, %, post blow down, limit and 28-day). A system with a timer will have two water meter inputs.
2. MegaTron controllrs have a maximum of 10 relay outputs.
3. This list covers our most popular options. Contact the factory for a complete list.

# Specifications

## Electrical

- **Input:** 95-240 VAC, 50/60 Hz
  - **Control:** 115 VAC, 5 Amp Relay
- Prewired units are supplied with an eight foot power cord and 11" output receptacles.

## Operational

- **Display:** 240 x 128 Graphic LCD
- **Conductivity Control:** 0-10,000  $\mu$ S/cm scale  
Boiler sample method is selectable from continuous, timed sampling or sample and hold.
- **pH:** 0-14 scale
- **ORP:** +/- 1000 millivolts scale  
The ORP setpoint can be tied to an optional 28-dayfeed timer as an override.
- **Accuracy:** +/- 1%
- **Feed Timers are all selectable from:**  
**Pulse** - water meter activated w/accumulator  
**Percent** - 1 - 100% of a cycle time.  
**Limit** - Limits feed with bleed  
**Post Bleed** - 1-100% of post bleed time with an over all limit.  
**28 Day** - biocide timer.

## Enclosure

Heavy duty NEMA 4X type high impact thermoplastic with padlockable gasketed Lexan viewing door.

## Environment

Ambient temperature: 0° to 125°F (-17 to 52°C)

Relative humidity: 0 to 100%

## Electrodes

Tower Standard electrodes are supplied in 3/4" Sch. 80 PVC female slip tees with quick release nut.

- **Conductivity:** TE-4A 150 psi / 140°F(58°C) Max
- **pH:** TPE-2 100 psi / 140°F(58°C) Max
- **ORP:** TOE-2 100 psi / 140°F(58°C) Max
- **Temperature:** TC-1 150 psi / 140°F (58°C) Max

Boiler Conductivity electrodes are supplied with 1" MNPT ss threads.

- **Conductivity:** BE-4B 250psi / 400°F(204°C) Max

**Shipping Weight:** Approximately 10 lbs.

**Dimensions:** W 12.5" x H 14 " x D 7"