

# MegaTron Controller

## Microprocessor Control of:

- Conductivity
- pH
- ORP
- Chemical Feed
- Biocide Feed
- Service Reports
- 4-20mA In & Outs

## Key Features

- Customizable Display
- On Board History Graphs
- Multiple System Capability
- Simple ATM Style Menu
- One Point Calibration
- Up to 20 Assignable Relays
- Relay Test Keys
- Customizable Notepad
- Multi-Level Security Code
- LSI or RSI Index Options
- 2 Year Replacement Warranty
- Full Graphic LCD Display
- Internet Communications Option



## Application

The MegaTron combines a simple ATM style menu with a 16 line graphic display and a large variety of options to make the most user friendly water treatment controller available.

Units can be configured to control a wide range of digital and analog inputs. Relay activation and names plus many other features are field selectable. The "Notepad" allows the input and history gathering of service report parameters.

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

# Build a Model

Units can be configured to control 1-4 systems. The model number starts with **MG** followed by the code for each function needed for the first system (**MGCPF3E**).

If building a dual system unit, put a - after the functions of a system and list the functions for the next system (**MGCPF3E-BF2**). If systems are the same, just put a **-X2,3 or 4** after a system (**MGCPF3E-X2**). Once the main control functions have been selected, insert another - and list the desired common options (**MGCPF3-CF3E-H1KY**).

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

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

## Make-up or Misc Conductivity (1 per system)

**M** = DI-4A Standard make-up 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

## Temp (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  
**H3** - Internet card with cellular modem  
**J** - Additional system expansion bus  
**K** - Additional control relays (K, K2, K3 ....)  
**N** - 4-20mA Inputs (N1-N6)  
**O** - 4-20mA Outputs (O1-O6)  
**S** - pH saturation indexes (with pH control)  
**V** - 5 volt D.C. output with water meter wires  
**Y** - Agency Approval (ETL, US&C)

## NOTES:

1. Timers selectable (pulse, %, post bleed, limit or 28-day). Each system has 2 water meter inputs.
2. MegaTrons have a maximum of 10 relay outputs.
3. Contact the factory for a complete option 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 feed 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"