

# LAKEWOOD INSTRUMENTS

## MODEL 140

### WATER TREATMENT CONTROLLER



The Model 140 uses the latest in microprocessor capability, giving the user a high level of application flexibility. Multiple inputs and very easy setup characterize this new technology. Water meters, sensors and plumbing assemblies are purchased separately.

**PART NUMBER 1239597 SHOWN**

Cooling Tower Water Treatment Controller W/Sensor and Flow Switch Plumbing on a Mounting Plate

#### FEATURES

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- Use this Controller for cooling towers.
- Removable power cord and receptacles for simple conduit installations.
- Scheduled feed, which can use two relays for biocides or other chemicals.
- One (1) water meter input, conductivity input, flow switch input, and 4-20 mA output are all standard features.
- Designed with a single circuit board for better reliability and lower cost.
- Large open shallow enclosure for easy wiring.
- The enclosure is rated NEMA 4X.
- Power selector switch for 115 or 230 vac operation.
- Heavy-duty stainless steel domed numeric keypad and illuminated graphical display allow for quick and easy programming. Steel domed switches improve the tactile sensing and life expectancy of the keypad.
- LED indicators for power, alarm and relay status.

#### BENEFITS

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- Easy to program with the Lakewood plain English, intuitive, and user friendly menu interface.
- Single circuit board design improves reliability.
- No add-on options. 4-20 mA output and biocide features are standard.
- Multiple methods of chemical feed for application flexibility.

#### SPECIFICATIONS

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<b>Conductivity range</b>	0-10,000 $\mu$ S	<b>Timer</b>	Max. blowdown time exceeded, relay time exceeded
<b>Conductivity sensor</b>	2 electrode	<b>Output Signal</b>	One 4 – 20 mA, isolated or non-isolated optionally powered
<b>Conductivity Resolution</b>	$\pm$ 10 $\mu$ S	<b>Output relays</b>	2 selectable use, 1 blowdown
<b>Temperature comp.</b>	500 ohm NTC	<b>Relay ratings</b>	3A each, 10A total
<b>Accuracy &amp; repeatability</b>	$\pm$ 1.0%	<b>Power</b>	120/240 VAC 50/60 Hz
<b>Deadband/Setpoint</b>	Adjustable	<b>Ambient</b>	32° - 120°F (0 - 49°C)
<b>Auto/Manual outputs</b>	Menu selectable	<b>Water temperature</b>	32°- 140°F (0 - 49°C)
<b>Keypad</b>	16 tactile push-buttons	<b>Pressure</b>	140 psi @ 100°
<b>Display</b>	16 X 2 Character	<b>Enclosure</b>	NEMA 4X
<b>Water meter input</b>	Contact head, paddle wheel or turbine		CSA and ANSI/UL

## ORDERING OPTIONS

### Controller Options

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- 1239594** Cooling Tower Water Treatment Controller Only. (No Sensor or Plumbing).
- 1239595** Cooling Tower Water Treatment Controller, Including Sensor Tee and Conductivity Sensor.
- 1239596** Cooling Tower Water Treatment Controller, Including Flow Switch Plumbing and Conductivity Sensor.
- 1239597** Cooling Tower Water Treatment Controller, Including Flow Switch Plumbing and Conductivity Sensor on a Mounting Plate (12 X 18).

### Cooling Tower Options

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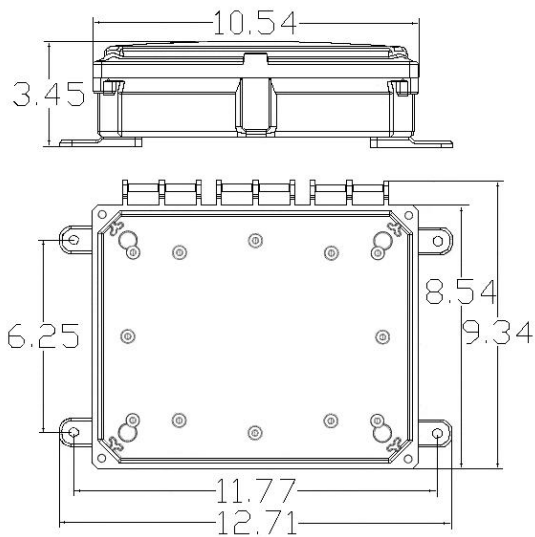
**1107003** Cooling Tower Flow Switch Plumbing



**1167214** Cooling Tower Sensor Tee



**1167158** Cooling Tower Sensor with 20 ft cable



## MODEL 140

<b>PART NO.</b>	<b>DESCRIPTION</b>
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1239595	140 with cooling tower sensor tee and sensor
1239596	140 with cooling tower flowswitch and sensor
1239597	140 with cooling tower FS and sensor on mounting plate

<b>PART NO.</b>	<b>CONDUCTIVITY COOLING TOWER CONTROLLER</b>
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1239594	140 controller only, no sensor
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<b>PART NO.</b>	<b>COOLING TOWER COMPONENTS</b>
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1167158	Sensor, Conductivity 2 elec w/20 ft Cable
1167157	Sensor, Conductivity 2 elec w/2 ft Cable
1169207	Sensor, Conductivity, 2 elec 4ft body
1167214	Plumbing, tee, 3/4 inch NPT
1107003	Plumbing, with 20' FS, remote plumbing

<b>PART NO.</b>	<b>REPLACEMENT PARTS</b>
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1166418	O-Ring, for sensor and/or flow sight, set of 10
1169740	Red Ring replacement Kit set of two
1107004	Reed Switch w/20 ft of cable
1167266	Flow Sight set of five
1167234	Flow Float set of five
1107003	Plumbing, with 20' FS, remote plumbing