



The Next Generation in
**Reliable
Controllers**

Introduction to the NexSys™ Control System



The **NexSys™** control system is the latest in a long line of reliable, easy to use controllers from Lakewood Instruments. The **NexSys™** control system uses the latest in microprocessor technology with a 5.7" **Color Touch Screen** interface for a high level of application flexibility.

All features, parameters, settings, and functional requirements to operate, program, and monitor the **NexSys™** control system are accessible from the touch screen and DO NOT require the use of an external input, PC or device to operate or access. The **NexSys™** control system even includes On-Board Help Screens with wiring, programming, and maintenance instructions.

The **NexSys™** control system comes **standard** with the following system interfaces and DMX outputs: LON EIA 709 FTT10, BACnet IP, and MODbus TCP. The unit comes from the factory ready to integrate readings into a BAS, including: The state of any installed relay (On/Off) , Water meter readings, Conductivity readings, Additional sensor readings (ph, ORP), sensor alarms, Additional 4-20mA input readings, Flow condition, and other digital inputs.

The **NexSys™** control system comes standard with Ethernet capability through a browser (HTML5) interface that allows 100% access to all features and control parameters of the controller.



The NexSys™ control system has an astounding array of built-in features such as:

- LonWorks, MODbus, and BACnet communications interface
- Ethernet capability through an HTML interface
- The capability to send E-service reports to a subscribed service
- The ability to display operating values with time and date stamps on color coded graphs with zoom and scroll features
- Up to eight active sensor inputs: 2 tower cond, 2 M/U cond, pH and ORP
- Trace chemistry capable with user definable correction factors as part of the programming
- Two water meter inputs with field expansion capability to four
- Enclosure is NEMA 4X rated
- Two flow switch inputs configurable to any relay output
- Ability to add up to eight 4-20mA input readings
- Ability to add four digital inputs
- Ability to mount every sensor/input up to 400 meters away from the controller via 4-wire twisted pair
- Ability to control the chemistry in two towers at the same time
- Six relay outputs expandable to ten relay outputs for user configurable operations such as:
 - Feed by Percent of Blowdown Time
 - Feed by Setpoint with Percent of Time Feature as Part of Spaced Feed
 - Trace Chemistry Control
 - By Makeup Totalized Gallons
 - By Blowdown Totalized Gallons
 - By Percent On-Time
 - By Scheduled Feed by Day and Time
 - As an Alarm Relay by User Selectable Alarms
- On-board Help Screens with wiring, programming, and maintenance instructions

Specifications

Touch Screen Interface:

5.7" diagonal viewing area
 Display size: 115X86 mm
 Pixel: 320X240
 Color: TFT 65536
 Backlight: LED or CCFL
 Power: 120/240 VAC 50/60 Hz

Relay ratings:

120VAC 3A per relay 15A total
 Enclosure: NEMA 4X

NexSys™

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Price \$	Type	S or D	1, 2 or X	1, 2 or X	1, 2 or X	1, 2 or X	S or D	1, 2 or X	S, D or X	4, 8 or X	4, 8 or X	S, L or X	1, 2 or X	XX
NexSys™ System Config (draft)	NXC													
Cooling Tower														
Systems (S=single D=Dual)														
Main Conductivity (1-2)														
Main pH (1-2)														
Main ORP (1-2)														
Make-up Conductivity (1-2)														
Relays (S= 6 or D= 10)														
Flowswitch (1 or 2)														
Water Meter Inputs (S=2 D=4)														
4-20mA Input (4 or 8)														
4-20mA Output (4 or 8)														
2nd Remote Display (S=5.7" L=15")														
Mounting Plate (1 or 2)														
Custom Designator (-XX)														

X=no Option needed

All items are code W except 2nd remote display which is a code D

Example

Single cooling tower controller
with Conductivity and pH sensors,
and plumbing with flowswitch

NXC S - 1 1 X X - S - 1 S - X X - X - X - XX