

**Emerson®**  
**E2 BX Series:**  
Building Control System



For the new generation  
of facility management



**EMERSON™**  
Climate Technologies

## Advanced building control – at your fingertips

The days of a building control system simply maintaining a comfortable temperature level are gone forever. Instead, controls must be able to operate systems economically, provide detailed power-usage information, keep up excellent indoor air quality, seamlessly interface to third-party devices and save energy. Also gone are the days of simple energy management systems, replaced with sophisticated enterprise-wide facility management systems. At the heart of this new generation of controllers is the E2 BX Series from Emerson Climate Technologies™



### Enterprise facility management

- Alarm
- Energy
- Food quality
- Condition based
- Set point
- Dispatch
- Refrigerant

Our monitoring and facility management services are designed specifically to cut energy and maintenance costs and to provide easy access to vital enterprise-wide information. That's why we are trusted by nearly 5,000 sites, 24/7, to keep facilities running at optimum levels.

### Taking back control

E2 BX Series controllers are easy to work with. Just pull a communication cable to each rooftop unit (RTU), and they're programmed for control, based on a specific temperature-sensor reading. You can create zones of variable heating or cooling to meet specific demands and cycle heating and cooling stages to maximize energy savings, while maintaining the correct temperature and relative-humidity set points.



### E2 Facility Management System

### Remote communications

- Automatic data collection
- Alarm receiving and multi-set set-point changes
- Security safeguards

E2 BX is accessible on site or through our remote-access software from any LAN, WAN or standard modem connection. You have access to full-color animated graphics, color-coded alarm indicators and real-time equipment displays.

### Power monitoring

- Demand shedding capability
- Power-usage logs

E2 BX maximizes building comfort levels while it minimizes wasted energy. Both a power monitor and a regulator, E2 BX comes equipped with extensive demand shedding features, as well as detailed power-usage logs, to help you spot trends and optimize performance.

# E2 BX SERIES

## Lighting control

- Floor lights
- Exterior signage
- Parking lot

Combining results from time schedules, light-level sensors and override buttons, E2 BX easily determines whether your lights are illuminated, optimizes your lighting needs and provides you with timed overrides. Just push a button, and specified lights are overridden and come on for a pre-determined period.

## Interoperability

- Refrigeration
- Fuel dispensers
- Irrigation systems

The E2 BX technology lets it monitor and control third-party devices – everything from refrigeration equipment and gas pumps to irrigation and security systems. Even Lennox® rooftops or Echelon®-based HVAC units are easily integrated – all from a single controller.

## HVAC and indoor air quality (IAQ)

The E2 BX is just as effective monitoring and controlling IAQ in HVAC applications, a crucial step in meeting ASHRAE standards. The advanced algorithms in the E2 BX bring in and condition only the required amount of outside air, further reducing energy usage and expenses.



### Lennox® RTU

- Direct interface
- Improved fault information
- Remote reset capabilities



MultiFlex RCB board



### Other RTUs

- Heat/cold control
- Unit status
- Factory-installed controller



### Echelon® HVAC unit

- Echelon® interface
- Unit status

	Lennox® RTU	Other RTUs	Echelon® HVAC unit
Heating/cooling set points	X	X	X
Occupancy schedules	X	X	X
Emergency override	X	X	X
IAQ	X	X	X
Alarm reset	X	X	
Alarm codes	X	X	
Direct interface	X		X
Remote unit reset	X		

## The “Intelligent” advantage

Now, there’s another way to reduce annual maintenance costs through Emerson® Intelligent Store™ architecture. A new interface designed in collaboration with Lennox Industries, Inc. allows Lennox® commercial RTUs to interface directly with E2 BX. This lets end-users easily adjust set points and view over 100 error codes. No more proprietary controllers with unique error codes – and no more costly technician visits when an HVAC unit needs resetting. It’s just one more way we give you added insight into your business.

## E2 BX capabilities

Capabilities	BX-300	BX-400
Custom air handlers	6	8
Packaged rooftop units	32	32
Lighting circuits	24	48
Power monitoring	32 circuits	32 circuits
Anti-condensate circuits	16	64
Analog sensor modules	64	72
Digital sensor modules	64	72
Time schedules	64	64
I/O board capacity	62	62
Echelon® device capacity	441	441
Lennox® interface	Yes	Yes
Specifications	QWERTY keypad, color display, modem/LAN/WAN remote communications, Internet accessibility, open protocol capabilities, operating temperature -40°F to 149°F, operating humidity 5 to 90%, non-condensing	

## Intelligent Store™ architecture

Emerson Climate Technologies™ now offers the industry's most innovative approach to providing you a single view into your entire network of facilities: Intelligent Store™ architecture. For the first time, you can truly understand what your facilities cost to operate and maintain, information you can use to make decisions about where and when to spend your resources.

Emerson® Intelligent Store™ architecture delivers advanced electronic control and monitoring of your stores' refrigeration, HVAC, lighting and other systems, all the way down to the component level. By integrating these systems and having them deliver actionable information to you, Emerson® can help you substantially lower your capital, engineering and operating costs.

### OEM integration

Because Emerson® works closely with all major HVAC, refrigeration, lighting and electrical distribution-panel original equipment manufacturers (OEMs) – who often factory install our products – we can minimize on-site installation and cost. And because of that across-the-board cooperation, you can count on a complete system that performs at optimum levels, right from its installation.

### Upgrading compatibility

Because the E2 BX uses the same RS-485 network as the Emerson® REFLECS and Einstein™ controller series, it's easy to upgrade an existing unit. Just mount the controller and transfer the power and communications connections. The program-backup capabilities of Emerson® remote-access software let you download Einstein™ programs, then upload them to the E2 BX. When you power up, the E2 BX automatically assumes control of the connected I/O network.

**INTELLIGENT  
STORE**  
COMPATIBLE



**EMERSON™**  
Climate Technologies

EmersonClimate.com

**For more information, contact  
Emerson® sales at 770.425.2724.**

Form No. 2006CPC-43 R2 (10/06)  
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