

# DLC

## Data Sheet and Specifications



### OVERVIEW

The DLC system is designed to concurrently control and manage HVAC units relative to one another, reducing demand, total kWh, and minimizing peak rate kWh use. The result is a reduction in total electrical expense while maintaining a comfortable environment. The DLC system is comprised of three separate components: the controller, thermostats, and USB to thermostat cable.

### KEY FEATURES

- Web interface: Simple, automated user control
- Secure access and thermostat lockout
- Real time monitoring of outdoor temperatures and forecasts
- Optimized start for cooling and heating
- Pre-cool automatically reduces peak rate use
- System alerts and reporting



### THERMOSTAT TECHNICAL SPECIFICATIONS

The thermostat monitors the temperature conditions in the room with its built-in sensor, which is located in the controller so as to not be affected by the temperature of the wall on which it is mounted. It is possible to connect an external sensor for monitoring the temperature of different locations.

#### HIGHLIGHTS

- Tight control of 0.5°C provides comfortable indoor environment.
- High impact plastic enclosure provides durability in commercial environments.

Operating temperature.....	-30-70°C(-22~158°F)
Supply voltage.....	12~24VAC/DC ±20%, 50-60Hz
Power consumption.....	100mA at 12VDC
Relay contacts rating.....	max 6A
Ambient humidity.....	10-90 %Rh
Operating Environment....	0 ~ 99% humidity non condensing
Material, enclosure.....	Flame proof plastic
Enclosure rating.....	IP31
Temperature sensor.....	10K thermistor ±0.5°C
Color.....	White/Off-white
Weight .....	200g

### CONTROLLER TECHNICAL SPECIFICATIONS

Mini-ITX Desktop Tower Charcoal with Hairline Texture Body

- 150W Power Supply
- Motherboard Compatibility: Mini-ITX
- Drive Bays: 1 External 5.25" Drive Bay (Slim). 1 Internal 3.5" Drive Bay
- Front Ports: 2 USB, HD Audio & Mic
- 40mm Fan

## THERMOSTAT WIRING CONNECTIONS

External wiring is connected to a terminal block on the circuit board

1. Thermostat power	9. 24VAC Common for relays
2. Thermostat ground	10. Heat – Stage 1
3. Analog Input 2	11. Cool – Stage 1
4. Analog Input 1	12. Heat – Stage 2
5. Digital Input 1	13. Cool – Stage 2
6. Communications –	14. Fan
7. Communications +	15. NC
8. Communications GND	16. NC

24VAC	GND	AI 2	AI 1	DI 1	Comm-	Comm+	Comm-G
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
24VAC	W 1	Y 1	W 2	Y 2	Fan	NC	NC

## CONTROLLER MOTHERBOARD SPECIFICATIONS

Intel® Desktop Board D425KT with integrated Intel® Atom™ processor D425 and the Intel® NM10 Express Chipset enables low-power consumption and reduces the package footprint by 70 percent. The board also features 10/100 integrated LAN



Features and Configurations	
Form factor	Mini-ITX /microATX compatible (170mm X 170mm)
AA# ( <a href="#">Altered Assembly</a> )	For BOX/BLKD425KT: E93083-xxx For LAD425KT: E93084-xxx For LAD425KTW: E93085-xxx
BIOS ID string	MWPNT10N.86A
Processor	<a href="#">Intel® Atom™</a> processor D425
Memory	<ul style="list-style-type: none"> <li>• Single-channel <a href="#">DDR3</a> with two slots for 1066/800 MHz memory support</li> <li>• Support for up to 4 GB maximum of <a href="#">system memory</a></li> <li>• <a href="#">Tested system memory</a></li> </ul>
Chipset	• <a href="#">Intel® NM10 Express Chipset</a>
Audio	<p><a href="#">Intel® High Definition Audio</a> subsystem in the following configuration:</p> <ul style="list-style-type: none"> <li>• Four-channel Intel® High Definition Audio</li> <li>• Front panel mic/headphone header (2x5)</li> </ul>
LAN support	Integrated 10/100 network connection
Peripheral interfaces	<ul style="list-style-type: none"> <li>• Up to seven <a href="#">USB 2.0</a> ports (4 external ports and 3 via headers)</li> <li>• Two <a href="#">Serial ATA</a> 3.0 Gb/s ports</li> <li>• PS/2 ports (Keyboard and Mouse)</li> <li>• One Serial Header and One Serial Port</li> <li>• One Parallel Port</li> </ul>
Expansion capabilities	• One PCI Conventional bus connector
Video	• VGA port