

# 13 POINT CONTROLLER FULLY PROGRAMMABLE

## OVERVIEW

The HVAC controls market requires a DDC controller that provides consolidated control with mid-range capability in a fully programmable, feature rich device.

The Circon™ UHC-320 unites a variety of configurable control blocks combined with the power of Circon BASIC programming language to provide exceptional application flexibility. The UHC-320 is all you need in a 13-point DDC controller.

## APPLICATIONS

Use the UHC-320 to implement tailored control applications for unique or custom HVAC mechanical designs. The UHC-320 with 6 universal inputs and 7 universal outputs, and all control blocks are easily configured using simple Windows®-based software. Flexible alarm, trend, schedule and PID control blocks can be used to quickly create effective control and monitoring solutions.

Circon's powerful BASIC programming language can be used, along with the configurable control blocks and the input/output points to implement more complicated control sequences. Circon BASIC is flexible and powerful, allowing a user with limited programming experience to create tailored control sequences for packaged units such as fan coil units, air handlers, rooftop units with economizer, and terminal units such as heat pumps and unit ventilators or any custom HVAC mechanical design.

The configuration and viewer software provided with the UHC-320, complemented by the Circon BASIC Compiler, is all fully compatible with Echelon® Corporation's LNS.

## ORDERING INFORMATION

Part number 10-0376



## Features and Benefits

- Seamless integration into interoperable LonWorks® networks
- Fully programmable with easy to use Circon BASIC programming language
- 6 Universal inputs configurable for voltage, current, resistance and dry contacts
- 7 Universal outputs configurable for voltage, current, and digital
- Onboard real-time clock allows for time-based events, data logging, and network master operation
- All memory is protected with a lithium battery
- Quick network access through an audio jack
- Faster, easier to use LNS plug-ins
- Adaptable for stand-alone or networked operation



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## SPECIFICATIONS

### I/O CAPABILITY

6 Universal inputs	10 k $\Omega$ thermistor, 1 k $\Omega$ RTD, 4-20 mA current. 0-10 VDC, digital (dry contact)
7 Universal outputs	4-20 mA current, 0-10 VDC, digital. Maximum drive 100 mA per output

### COMMUNICATIONS

Transceiver	Echelon Free Topology Transceiver (FTT-10A) @ 78 kbps
Wire type	AWG22 to AWG16 stranded (use only twisted pair wiring and copper conductors for network)
Neuron <sup>®</sup>	3150, 10 MHz

### POWER SUPPLY

Controller	1.6 A, 24 VAC 50-60 Hz or 24 VDC
Fuse	2.5 A slow-blow (Bussman GMD-2.5A, Littlefuse 23902.5A)
Power fail protection	Lithium battery retains data in RAM and clock

### MECHANICAL

Operating temperature	32°F to 122°F (0°C to 50°C)
Relative humidity	20% to 95% RH (non-condensing)
Weight	1 lb. 1 oz. (485 grams)
Dimensions:	1.9" x 5" x 9" (48 mm x 127 mm x 229 mm)
Enclosure material:	PVC, Inflammability class V0 (UL94) and metal
Mounting	DIN rail

### CERTIFICATION

Class II device (when powered by class II supply)  
 CSA 22.2 #205-M1983, #950-M89  
 This device complies with UL 916 certification for Energy Management Equipment  
 This device complies with Part 15, Part J, Class A of the FCC rules for Radio Frequency Devices  
 This device complies with EMC Directive 89/336/EEC

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Circon Systems Corporation operates a quality management system independently certified to comply with the requirements of ISO 9002.