Multi Protocol Real Time Clock



Expandable I/O

**Ethernet Port** 

# 15 POINT FLEXIBLE I/O CONTROLLER (MULTI PROTOCOL)

### **OVERVIEW**

Looking for a low cost premium, fully programmable BAS controller that can support multiple protocols? Then SCC-420 is the perfect fit. Control virtually any terminal unit application such as: Rooftop Units, Fan Coil Units, Heat Pumps, Unit Ventilators, Air Handlers, and Plant Control. Seamlessly and easily pass data between BACnet/IP, LON, and Modbus networks.

The Circon<sup>™</sup> SCC-420 combines easy-to-configure I/O with flexible protocol gateway functionality, all at an incredible price per point and all as standard features.

The SCC-420 includes 15 local I/O points that can be increased to 47 points using the Circon UIO-184 I/O Expansion module.

Circon's acclaimed Catalyst<sup>®</sup> graphical programming tool is used to freely program SCC-420 for an exceptional application and gateway flexibility.

#### **APPLICATIONS**

Use SCC-420 with its built-in I/O points to control any unitary equipment or implement complex plant control or a simple remote I/O device.

Read/Write and pass data between BACnet, LON, and Modbus networks. Mathematically or logically manipulate data before transferring to other networks.

Circon Catalyst includes over 150 function/program blocks with support to create your own custom blocks. EBAC will also provide you with free sample program library which can readily be loaded into any SCC-420.

EBAC's Windows-based configuration and programming software for the SCC-420 is available at no charge, and are fully compatible with Echelon's LNS<sup>®</sup> platform.

#### **ORDERING INFORMATION**

Part number: 10-0470



#### **FEATURES**

- Powerful, industry-leading 32-bit ARM processor
- Incredible price per point →
- Onboard scheduling, trending, alarming  $\rightarrow$
- $\rightarrow$  Fully programmable with flexible and easy-to-use Circon Catalyst<sup>®</sup> programming tool
- $\rightarrow$  High performance BACnet/IP capability with support for variety of analog, digital and multistate server and client objects with create as you go feature. Built in BACnet browser.
- $\rightarrow$  High performance LonTalk capability with support for variety of static and dynamic network variables including structured variables with create as you go feature.
- $\rightarrow$  Built-in Modbus RS-485 expansion port, communicate with utility meters, VFDs, etc.
- Highly flexible protocol gateway functionality
- $\rightarrow$  5 relay outputs and 3 analog outputs simplify connecting to a variety of digital, floating and analog-controlled actuators
- 5 resistive inputs connect to a variety of sensors
- $\rightarrow$  2 voltage inputs for CO2, current monitoring, etc.



## **SPECIFICATIONS**

# SCC-420

O CAPABILITY		
7 Inputs:	Four 10 k $\Omega$ thermistor, Precon curve: Type II model 24 or Type III model 3, or dry contact	
	One 1 k $\Omega$ RTD or dry contact	
	Two voltage inputs, 0-10 VDC	
3 Analog Outputs:	0-10 VDC, maximum drive of 100 mA per output	
5 Digital Outputs:	Dry contact relay: 2.0 A maximum at 24 VAC or 24 VDC	
Expansion I/O:	Up to 2 UIO-184 I/O Expansion modules	
HARDWARE		
Processor:	ARM9 @ 400MHz	
Memory:	64 MB Flash, 64MB RAM	
EIA-709 (LonTalk) Port:	TP/FT-10 @ 78 kbps (LON)	
Serial Ports:	1 RS-485 expansion port (Modbus RTU Master or Expansion I/O)	
Ethernet Ports:	1 RJ-45 10/100 Ethernet (BACnet/IP, HTTP)	
On Board Aux Power:	15 VDC @ 100mA To Power Field Sensors	
POWER SUPPLY		
Controller:	2.0 A, 24 VAC, 50-60 Hz, or 24 VDC	
Fuse:	2.0 A slow-blow (Bussmann GMD-2.0A, Littelfuse 23902.0A)	
Rectifier:	Half-wave	
MECHANICAL		
Operating Temperature:	32°F to 122°F (0°C to 50°C)	
Operating Humidity:	5% to 95% RH (non-condensing)	
Weight:	15 oz. (420 grams)	
Enclosure Dimensions:	1.0" x 5.6" x 6.1" (25.4mm x 142.2mm x 155.6mm)	
Enclosure Material:	Metal	
Mounting:	Four sheet metal screws	
AGENCY LISTINGS AND	REGULATORY COMPLIANCE	6
Class II device (when powere	d by a class II supply)	(SP®
CSA(C US) 22.2 #205-M1983	#950-M89	CUS (Pending)
Part 15, Class B of the FCC Ru	le for Radio Frequency Devices	<b>F</b> @
EMC Directive 89/336/EEC		(Pending)
EFFICIENT BUILDING A	JTOMATION CORP.	
#1004 - 7495 132nd Street, S	urrey BC, Canada V3W 1J8	
Telephone: +1 604.503.4404		EFFICIENT
Website: <u>www.circon.com</u> E	mail: <u>info@circon.com</u>	BUILDING AUTOMATION
YouTube: <u>Circon BAS</u>		
Specifications subject to change v	vithout notice.	
	nt Building Automation Corp. Echelon <sup>®</sup> , LNS Powered <sup>®</sup> , LonWorks <sup>®</sup> , Neuron <sup>®</sup> , and L	.NS® are trademarks of Echelon Corporatio

registered in the United States and other countries. Windows<sup>®</sup> is a trademark of Microsoft Corporation registered in the United States and other countries. LonMark<sup>®</sup> and the LonMark logo are managed, granted and used by LonMark International under a license granted by Echelon Corporation. BACnet<sup>\*</sup> is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

DOCUMENT # 80-0426 / REVISION 2.0 / PRINTED IN CANADA