HARRIS
Integrated Solutions

Building Automation Made Easier With Smart Technology

Authorized Dealer of
AutomatedLogic

OPTIFLEX™ OPTIMIZATION SOLUTIONS

CHILLED WATER SYSTEM OPTIMIZER

CHILLED WATER SYSTEM OPTIMIZER FOR THE WEBCTRL® SYSTEM

The OptiFlex chilled water system optimizer is a sophisticated, scalable, native BACnet optimization solution for chilled water plants. The chilled water system optimizer minimizes the energy use of the entire chilled water system, up to and including air handling units and other water side chilled water consumers. By providing optimized control of the chilled water and condenser water setpoints, the chilled water system optimizer can lower energy costs while also maintaining occupant comfort levels in the building. The chilled water system optimizer solution consists of a self-adapting control algorithm packaged in an application specific Automated Logic controller.

OptiFlex™

KEY FEATURES AND BENEFITS

Application Features

- Designed to be used on plants of varying size, up to a maximum of eight chillers
- Adapts automatically to changing environmental conditions and system changes over time.
- Senses total system energy usage including all plant room equipment and airside energy consumption
- Minimizes energy use over the entire chilled water system, including chilled water plant equipment and air-side chilled water consumers.
- Functions as an integation to the existing plant control system, intelligently computing optimum chilled water and condenser water setpoints while continuously monitoring plant room and load-side energy consumption.
- Fail-safe logic is designed into the system so that the plant will revert to default setpoints in the event that optimized setpoints cannot be determined

Hardware Features

- Monitors and displays optimization metrics via integrated dashboard
- Works with the chilled water side alone, condenser water side alone, or both
- Can work with virtually any existing plant control system
- Integrates easily via network communications with all mechanical and electrical equipment, regardless of brand
- Interfaces easily with the Automated Logic PlantCTRL chiller plant solution enabling additional plant efficiency improvements
- Adjusts chilled water and condenser water setpoints to achieve overall combined chiller plant and air-side energy savings
- Lower first cost versus competitor offerings that require extensive plant analysis, system modeling, control system and mechanical system upgrades.

WebCTRL®

The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.

SPECIFICATIONS

Part #	OFBBC-NR OptiFlex BACnet Building Controller
BACnet Conformance	Conforms to the BACnet Building Controller (B-BC) Standard Device profile, as defined in BACnet 135-2012 Annex L, Protocol Revision 14
Power	24 Vac +/- 10%, 50 - 60Hz, 50 VA | 24 Vdc +/- 10%, 15 W
Communication	
Gig-E Port	Dual, 10/100/1000 Base T Ethernet ports supporting native BACnet over IP and/or BACnet/Ethernet, or Modbus TCP/IP
Serial Port 1	For communication with the following: - BACnet/MSTP network at 9,600 to 115,200 bps - Modbus serial network at 9,600 to 115,200 bps
Serial Port 2	For communication with the following: - BACnet/MSTP network at 9,600 to 115,200 bps - Modbus serial network at 9,600 to 115,200 bps
Service Port	Ethernet port at 10 or 100 Mbps for setting up the controller and troubleshooting through a local connection to a computer or connecting to the OptiPoint™ interface
USB Port	USB 2.0 host port for device recovery
Status Indicators	LED's indicate status of communications, running, errors, and power
Microprocessor	32-bit ARM Cortex-A8, 600MHz processor with multi-level cache memory
Environmental Range	-40°F to 158°F (-40 to 70°C), 10–90% relative humidity, non-condensing
Physical	UL94-5VA plenum rated enclosure for installation in plenum (or other space for environmental air) in accordance with NEC Section 300.22 (c) and (d)
Memory	16 GBs eMMC Flash memory and 256 MB DDR3 DRAM (22 MB available to use). User data is archived to non-volatile flash memory when parameters are changed, every 90 seconds, and when firmware is deliberately restarted
Protection	Protected by a replaceable, fast-acting 250 Vac, 2A, 5mm x 20mm glass fuse. Power and network requirements comply with the EMC requirements EN50491-5-2
Real Time Clock R	Real Time Clock Real-time clock keeps track of time in the event of a power failure for up to 3 days
Compliance	**United States:** FCC compliant to Title CFR47, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; **AS/NZS:** RCM Mark 61000-6-3; **Canada:** UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant, ICES-003, Class A; CE Mark Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; **UKCA** Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012.
Plastic Rating	Fire-retardant plastic ABS, UL94-5VA
Mounting	DIN rail mounting or screw mounting

Figure 1: Physical Dimensions

	in.	cm
Width:	7.1	18.03
Height:	6.95	17.65
Depth:	2.09	5.31
Weight:	1.1 lb	0.48 kg

Assembled in the United States