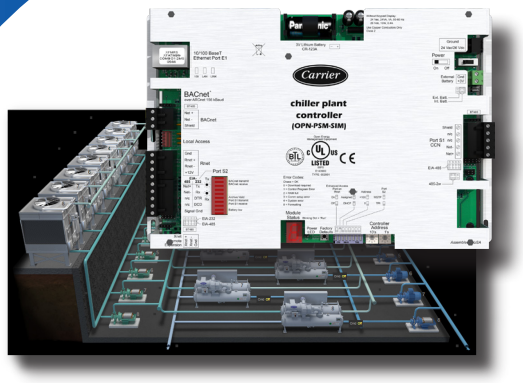
i-Vu® Building Automation System
Carrier® ChillerVu™ - PSM SIM

Part Number: OPN-PSM-SIM



The Carrier® ChillerVu™ is a sophisticated, scalable, native BACnet® control solution for chiller plant control and operation. The Carrier ChillerVu works in conjunction with a library of factory-engineered control programs that are specifically designed to cover the most common chiller plant configurations.

These factory-engineered control programs are designed to provide enhanced control over all aspects of a chiller plant, coordinating the control of chillers, pumps and towers into a finely tuned, cohesive system. Whether you have 2 or 20 chillers, the i-Vu chiller plant controller is able to control Carrier 19, 23, or 30 series chillers (air or water-cooled). It also has full integration capabilities, allowing it to monitor and control other equipment in the chiller plant as well, including non-Carrier chillers.

System Benefits

- Compatible with Carrier's 19, 23, and 30-series chillers (air or water-cooled)
- Easy startup and commissioning using the i-Vu Pro user interface
- Fully plug-and-play with the Carrier i-Vu building automation system (BAS). As an integrated component of the i-Vu BAS, the controller can respond to the needs of the building, automatically starting or stopping the plant, resetting the chilled water supply temperature, and matching the tonnage produced to the tonnage required by the building.
- Supports integration to chiller plant equipment using Carrier CCN®, BACnet, Modbus®, and LonWorks®[1] protocols
- Embedded trends and alarms provide insight on chiller plant performance and also aid in system troubleshooting and maintenance

Animated Chiller Plant Graphics

- High quality, automatically generated plant room graphics, requiring minimal user input
- Basic, representative piping layout showing relational equipment locations
- Equipment complement selectable from within EquipmentBuilder
- Up to eight chillers, towers, condenser and chilled water pumps in any combination
- Live status data, plus animation indicating equipment running state

Energy Saving Capabilities

- Enhanced chiller staging dynamically matches the number of running chillers to building load
- Variable flow pump sequences minimize pump energy consumption
- Staged and variable speed tower fans minimize tower fan energy consumption
- Demand limiting limits plant energy consumption to fixed levels, avoiding excess electrical demand charges
- Sophisticated system scheduling reduces unnecessary plant run time

Sampling of Supported Control Features

- Preconfigured, user editable energy dashboards – actionable plant energy data graphically displayed
- Enhanced staging via chiller, tower, and pump manager programs
- Application specific staging of Carrier 23XRV chillers (series counterflow)
- Variable primary flow chilled water pumping
- Variable flow condenser pumping
- Staged and variable speed tower fans

Software Features

- Supports library-driven programming using EquipmentBuilder
- Supports custom programming using LogicBuilder or Snap

[1]Requires Serial LonTalk Adapter (SLTA-10), available from Echelon Corporation.

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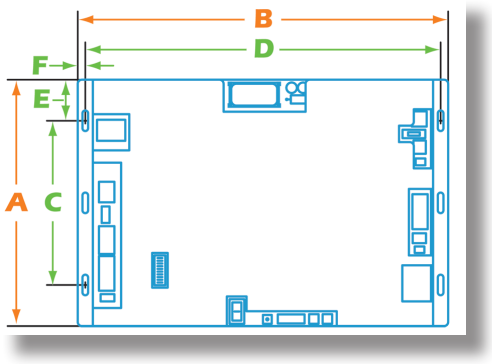
Specifications

BACnet Support	Advanced Application Controller (B-BC), as defined in BACnet 135-2012 Annex L, Protocol Rev. 9
Communication Ports	**Ethernet Port (E1):** 10/100 BaseT Ethernet port for LAN, BACnet/Ethernet, BACnet/IP, and/or Modbus TCP/IP communications **BACnet port:** ARC156 communication port **Port S1:** EIA-485 port for CCN Network and/or CCN Service Tool Connection (9600 and 38400 baud) **Port S2:** Configurable EIA-485/EIA-232 port for third party network connections, including: -BACnet MS/TP @ 9600, 19200, 38400, and 76800 baud -Modbus (RTU and ASCII modes) @ 9600, 19200, 38400, and 76800 baud -LonWorks (requires SLTA-10 adapter) @ 38400 and 76800 baud **Local Access port:** For system start-up and troubleshooting (115.2 kbps) **Rnet port:** For connecting Carrier communicating room sensors and Carrier's touchscreen interface **Xnet Remote Expansion port:** For communication with up to 6 MPC Open XPIO48 and/or MPC Open XPIO816 expanders (500 kbps). Connection options: Mount in a stack, or mount remotely up to 100 ft. away from PSM-SIM.
Protection	**Incoming power:** replaceable 3 Amp Pico® fuse **Network:** non-replaceable internal solid-state polyswitches that reset themselves when fault clears The power, network, and I/O are also protected against voltage transient and surge events.
Battery	10-year Lithium CR123A battery provides a maximum of 720 hours of time retention during power outages.
Status Indicators	LED status for communications and low battery. 7-segment status display for running, error, and power.
Listed By	UL-916 (PAZX), cUL-916 (PAZX7), CE, FCC Part 15-Subpart B-Class A
Addressing	Rotary dip switches set MAC address of controller
Real-Time Clock	Battery-backed real time clock
Environmental Operating Range	**Operating:** 0 to 140ºF (-18 to 60ºC), 0 to 90% RH, non-condensing **Storage:** -20 to 140ºF (-29 to 60ºC), 0 to 90% RH, non-condensing
Power Requirements	24VAC ± 10%, 50-60Hz 24 VA power consumption 26VDC (25V min, 30V max), 10W
Dimensions	**Overall** **A:** 7-1/2 in. (19.1 cm) **B:** 11-3/8 in. (28.9 cm) **Mounting** **C:** 5 in. (12.7 cm) **D:** 10-7/8 in. (27.6 cm) **E:** 1-1/4 in. (3.2 cm) **F:** 1/4 in. (.6 cm) **Depth:** 1-1/2 in. (3.8 cm) **Weight:** 1.4 lbs. (.64 kg)



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