



Controls by Monodraught

iNvent 2 - Optional BACnet Module

The Monodraught iNvent 2 system is a Natural Ventilation management system for up to 4 zones. It utilises seasonally adjusted proportional control based on internal temperature and CO₂. With configurable sensor, strategy and actuator mapping via USB, as well as built in data logging, the iNvent 2 system can control Natural Ventilation systems to suit any building application.

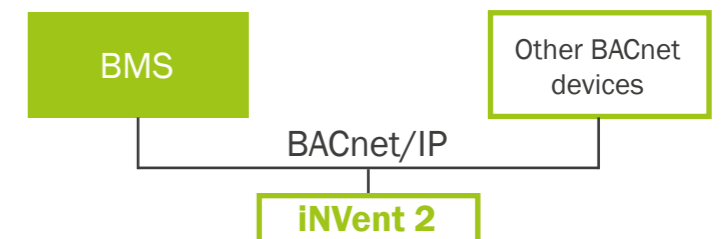
The BACnet module allows an iNvent 2 system to be installed on to a BACnet/IP network and make visible all the inputs and outputs of the control panel.

Technical Details

The BACnet module for iNvent 2 is a Cimetrics EasyBAC module based on a Lantronix XPort device. This module plugs into the iNvent 2 Control Panel and interfaces with the on-board micro-controller to provide BACnet visibility of iNvent 2.

Each iNvent 2 system has its own unique IP address on the BACnet/IP network.

The BACnet module requires an RJ45 Ethernet connection (by others) from the BACnet/IP network to the iNvent 2 Control Panel.



Wiring Requirements

10/100BaseT Ethernet connection (RJ45 Terminated, Cat5 or better rated cable)

BACnet Details

Device Objects

Object Name	Value
Vendor Name	Cimetrics
Vendor ID	14
Model Name	iNvent 2
Instance Number	<serial number of unit*>
Firmware Revision	<various>
Application Software Version	<various>
Database Revision	<various>
*Unless otherwise explicitly requested when providing IP details	

Binary Inputs

Object Name	Instance #	Description
Fire_SW_Open	49	Fire Switch Open
Fire_SW_Close	50	Fire Switch Close
Comp_SW_Open	51	Competition Switch Open
Comp_SW_Close	52	Competition Switch Close
Smoke	53	Smoke
Fire	54	Fire Alarm
Rain	55	Rain
Heat	56	Heating Interlock

Analogue Outputs

Object Name	Instance #	Description	Units
ZoneA_Damper	11	Damper zone A	%
ZoneA_Louvre	12	Louvre zone A	%
ZoneA_Wall_Actuator	13	Wall Actuator zone A	%
ZoneB_Damper	16	Damper zone B	%
ZoneB_Louvre	17	Louvre zone B	%
ZoneB_Wall_Actuator	18	Wall Actuator zone B	%
ZoneC_Damper	21	Damper zone C	%
ZoneC_Louvre	22	Louvre zone C	%
ZoneC_Wall_Actuator	23	Wall Actuator zone C	%
ZoneD_Damper	26	Damper zone D	%
ZoneD_Louvre	27	Louvre zone D	%
ZoneD_Wall_Actuator	28	Wall Actuator zone D	%
ZoneE_Damper	31	Damper zone E	%
ZoneE_Louvre	32	Louvre zone E	%
ZoneE_Wall_Actuator	33	Wall Actuator zone E	%
ZoneF_Damper	36	Damper zone F	%
ZoneF_Louvre	37	Louvre zone F	%
ZoneF_Wall_Actuator	38	Wall Actuator zone F	%
ZoneG_Damper	41	Damper zone G	%
ZoneG_Louvre	42	Louvre zone G	%
ZoneG_Wall_Actuator	43	Wall Actuator zone G	%
ZoneH_Damper	46	Damper zone H	%
ZoneH_Louvre	47	Louvre zone H	%
ZoneH_Wall_Actuator	48	Wall Actuator zone H	%
Fault	57	Fault signal	N/A

Analogue Inputs


Object Name	Instance #	Description	Units
ID	1	Panel Serial Number	N/A
Year	2	Year	Years
Month	3	Month	Months
Day	4	Day	Days
Hours	5	Hour	Hours
Minutes	6	Minutes	Minutes
Global_Status	7	Global Status	N/A
Ext_Temp	8	External Temperature	°C
ZonaA_Status	9	Local Status Zone A	N/A
ZoneA_Temp_Avg	10	Temp. Average Zone A	°C
ZoneB_Status	14	Local Status Zone B	N/A
ZoneB_Temp_Avg	15	Temp. Average Zone B	°C
ZoneC_Status	19	Local Status Zone C	N/A
ZoneC_Temp_Avg	20	Temp. Average Zone C	°C
ZoneD_Status	24	Local Status Zone D	N/A
ZoneD_Temp_Avg	25	Temp. Average Zone D	°C
ZoneE_Status	29	Local Status Zone E	N/A
ZoneE_Temp_Avg	30	Temp. Average Zone E	°C
ZoneF_Status	34	Local Status Zone F	N/A
ZoneF_Temp_Avg	35	Temp. Average Zone F	°C
ZoneG_Status	39	Local Status Zone G	N/A
ZoneG_Temp_Avg	40	Temp. Average Zone G	°C
ZoneH_Status	44	Local Status Zone H	N/A
ZoneH_Temp_Avg	45	Temp. Average Zone H	°C


Information Required – Static IP Address


We require a fixed IP address to pre-programme into the BACnet module prior to delivery, specifically the IP address, sub-net mask and default gateway of each system in IPv4 format.

This must be provided to Monodraught two weeks prior to delivery.

If an IP address is not provided by the client, the default range of 192.168.0.100 – 192.168.0.200 will be used, with a subnet mask of 255.255.255.0. The default gateway will also be set to 192.168.0.1.

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