ETAP
EXCELLENT LIGHTING, SAVING ENERGY

# BACNET® – INTERFACE MODULE

The BACnet® software module enables the integration of the Excellum energy control system with a BACnet® compatible building automation system. Excellum operates autonomously while lighting status, lighting levels, movement detector status and energy usage can be communicated via BACnet®. Connection between the two systems is established via BACnet®/IP.

## BACnet® interface module:

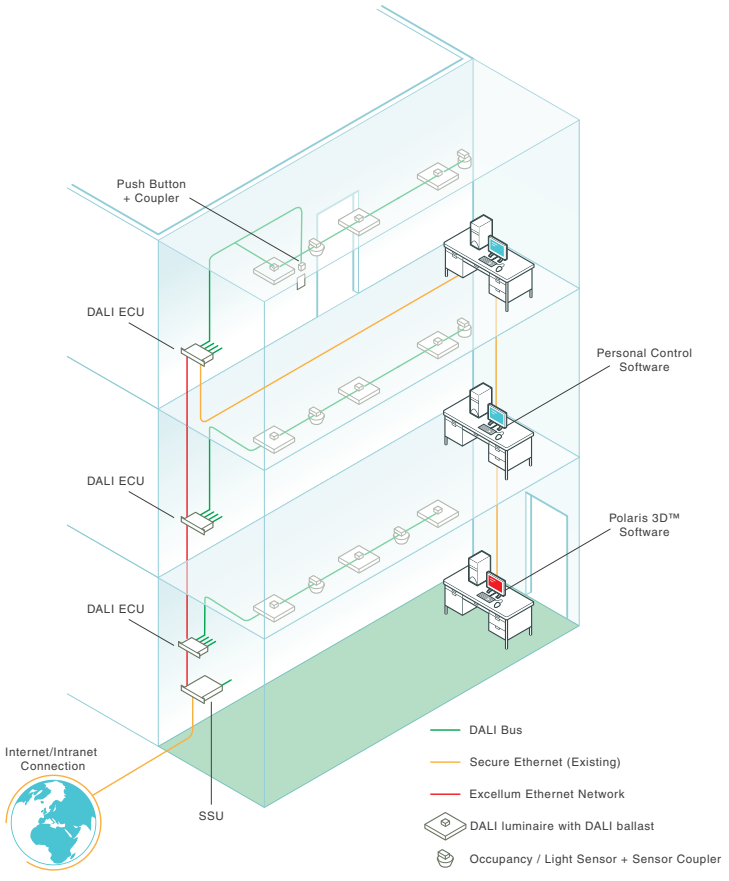
- Enables BACnet® switching and dimming control.
- Provides peak load control over the lighting load via the following two methods:
  - Excellum provides information about the amount of lighting load available for shedding in a specific zone of the building or in the building as a whole. Peak load requests can be made for each selected zone or group individually.
  - Excellum can also initiate prioritized Peak load by predefined zones to reduce the total lighting load.

Both types of peak load requests can be defined in Watts or as a percentage of the current lighting load.

- Notifies Excellum of an emergency through a BACnet® connected fire alarm input to turn all lights on.
- Shares occupancy information obtained by Excellum with a BACnet® client to integrate in other systems (i.e. HVAC) with occupancy.
- Utilizes a centralized BACnet® time schedule.

To ensure smooth and user-friendly integration, the BACnet® software module creates access points with names and descriptions that can be customized to accommodate any BACnet® control client's naming scheme. It also exports standard BACnet® object properties in a clear, structured manner and can define an unlimited number of groups of luminaires.

The Excellum BACnet® Interface Module adheres to the ANSI/ASHRAE standard 135-2004 "BACnet®" (ISSN 1041-2336)




**The Building Energy Management System for Lighting**

*Excellum is a light management system that aims to improve personal lighting comfort and to achieve optimum energy saving. Combining the user-friendly 3D control software with the freely addressable switching and dimming functions, Excellum is able to create the right light in the right place at the right time with optimum quality while at the same time avoiding unnecessary energy consumption.*

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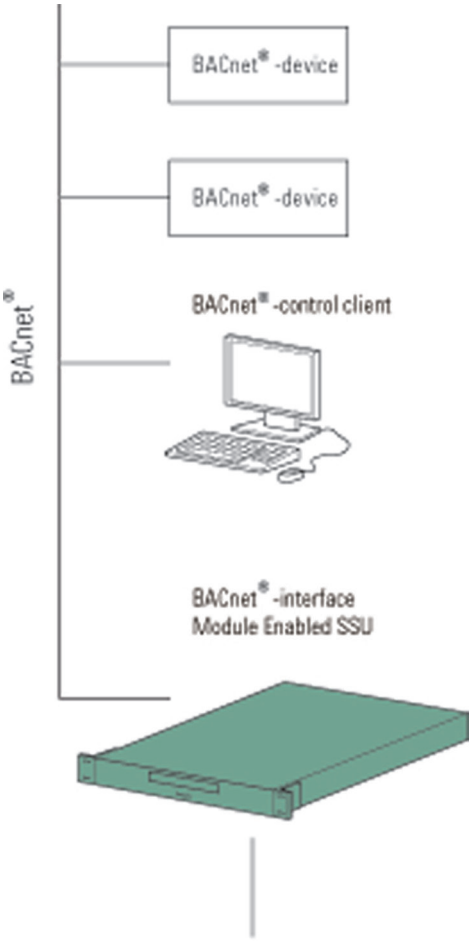


to Excellum network

## Technical description

The Excellum BACnet® Interface Module shares the following information with BACnet® clients:

| Property | BACnet® type | Description |
|---|---|---|
| Light Zone State | Binary Value* | State of the defined lighting zone - on or off |
| Light Zone Dimming | Analog Value* | Light output level of the defined lighting zone, from 100% (maximum light output) to 0% (minimum light output) |
| Fire Alarm State | Binary Input | State of the fire alarm system -alarm activated or alarm not activated |
| Occupancy State | Binary Output | State of the defined occupancy sensor - occupancy detected or not detected |
| Sheddable Load | Analog Output | Reports the total lighting load available for load reduction, defined in Watts |
| Shed Status | Analog Output | Reports the total current load reduction achieved according to Excellum defined prioritization, defined in Watts |
| Shed Request | Analog Input | Requested total amount of load reduction, defined in Watts or as a percentage of sheddable load |
| Sheddable Load (Group) | Analog Output | (As above, unprioritized for the selected group) |
| Shed Status (Group) | Analog Output | (As above, unprioritized for the selected group) |
| Shed Request (Group) | Analog Input | (As above, unprioritized for the selected group) |

** Read/write BACnet® properties*

## Order code

BACnet®: C2X01

Server with BACnet®: C3C01-B

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