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ODIN Building Automation Systems, LLC

**The ODIN (Operator Display Integrated Network) Product Specifications Document –**

\*\*\* This specification is designed to be used by a specifying engineer as a basis of design with the intention of being included in the HVAC and or Control system section of the specifications as a BACnet Operator Display.

(Control System Products Section)

Automation System Operator Display **(BACnet Operator Display BTL Certified B-OD)**

1. System Overview
2. The BACnet operator display shall consist of a software product that will be deployed on the building automation system LAN network and shall provide connectivity between the automation system devices and objects, including BACnet over IP and BACnet MS/TP networks to a cloud based internet server for access by desktop, laptop or mobile user’s web browsers.
3. There shall be 2 segments of the operator display. The automation system local area network (LAN) shall have the ODIN BACapp software installed on a Windows PC computer or Windows server operating system. The BACapp shall be installed by software download from an internet connection and shall be properly licensed by an authorized ODIN dealer. Once installed, the BACapp will gather all the certified BACnet device and object information from controls and equipment and provide an “always on” connection to the cloud ODIN Application Server (AS).
4. An internet browser connection to the cloud ODIN AS by any supported device will require username and password credentials to access the connected site. Once connected the user will have the ability to monitor, adjust, trend, schedule and receive notification messages as configured by the authorized dealer.
5. Certification
6. The operator display shall be BACnet certified by the BACnet International Testing Labs and meet all the requirements of the BTL B-OD certification.
7. Interoperability
8. The operator display shall be compatible with any certified BACnet devices and shall provide a seamless interface to the devices and objects on the system network. The operator display shall at all times maintain the integrity of the BACnet protocol and be able to read and write to the device objects properties.
9. The operator display shall be complimentary to existing and new BACnet supervisory systems. Each IP device and the associated objects shall be discoverable in a tree format including detailed device and object properties. Property values shall be editable as allowed by the supervisory system and or devices and objects.
10. Scalability
11. The operator display shall be scalable from a single device to a multi-building system and shall be capable of single or multi-site access with a single log on.
12. Security and Access
13. User access to the cloud AS server shall be protected by a browser SSL connection.
14. Log in access by each user shall require a username and password protection and shall enable each user to access read, write and specifically assigned areas of the automation system.
15. Features and Functionality
16. In addition to BACnet object read and write capability the operator display shall be fully capable of creating trends, schedules and alarm notifications. The administration level access shall provide all user configurations for these functionalities.
17. Trends shall be easily accessed from the user interface (UI) web page and shall be immediately configurable with default settings. Trend charts shall be rendered as a separate web page and allow for downloading a .png, .jpg, .svg or .pdf file, saved as a .csv, .xlsx or json file or printed as a document. The trend chart shall also be capable of annotation using text or shape notation. Each trend shall be able to be modifiable by the start and stop range and provide for Auto Updating. Trends will continue to collect data if the BACapp becomes disconnected from the cloud ODIN AS. Once reconnected, the BACapp will send the latest Trend data to the ODIN AS for storage.
18. Schedules shall be able to be created for any object and shall provide a graphical seven-day format with exception schedule capability. Schedules will continue to run if the BACapp becomes disconnected from the cloud ODIN AS.
19. Alarms shall be configurable for any object. The alarm properties shall fully support the BACnet property functions and include high and low limit adjustment, time delay, dead band, event enable, and editable alarm messaging. Alarms will continue to run and monitor their reference BACnet objects if the BACapp becomes disconnected from the cloud ODIN AS. Once reconnected to the ODIN AS, alarms that have triggered will be sent to ODIN for notifying users.
20. BACnet automation system LAN hardware requirements
21. Local BACapp software applications shall install on Windows 7,8,10 PC or Windows Server OS.

Recommended System Requirements: I5 dual core CPU, 4gb RAM, 500 GB HD, with internet access.

1. Cloud Access is browser accessible via SmartPhone (Android and iOS), Tablet, computers (MAC or PC) access using Safari, Microsoft Edge, Google Chrome, Firefox over LAN connection or WiFi.
2. Warranty
3. The BACnet operator display shall be warranted against defects for a period of 12 months from the date of license activation.
4. Updates shall be provided at no charge during the warranty period.
5. Continuing software subscription services after the warranty period shall be available to the owner.
6. Contact: ODIN Building Automation Systems, 2 Townsend W, Unit 2, Nashua, NH 03063, (844) 384-6346, www.connectwithoding.com