





# Saia PCD® Supervisor

### Description

Saia PCD® Supervisor is a building monitoring and management solution built upon the powerful Niagara 4 platform. It is capable of integrating Saia PCD® controllers, third party devices and internet protocols into a centralised software platform that is designed to manage buildings at an enterprise level.

Saia PCD® Supervisor serves real-time graphical information to standard web-browser clients and also provides server-level functions such as: centralized data logging, archiving, alarming, trending, master scheduling, system-wide database management, and integration with enterprise software applications – all of which can be used for highlighting and investigating energy use within buildings.

In addition, Saia PCD® Supervisor provides a comprehensive, graphical engineering toolset for application development. HTML5 support enables the customisation of user interfaces that are viewable on diverse web-enabled computers, tablets and phones.

Third party device integration using open standard protocols such as BACnet, Modbus, M-Bus and KNX is also supported.

### **Features**

- The Saia PCD® Supervisor on the Niagara 4 includes the following new easy features which helps to enhance user experience:
- **Easy Templating** feature is a palette builder that allows you to own & maintain your own graphical standards & reuse.
- **Easy Binding** feature is an AI based tool that enables auto-binding of a group of data points with complex schematics.
- **Easy Database Manager** allows you to remove unused data points that can impact system performance.
- **Point List View** easy feature allows you to easily view and monitor the complete system.
- Supports Honeywell Optimizer Advanced controller over S-Bus network.
- Option to define & save customized login parameters as per user reference.

- Saia PG5® Data Import Wizard allows the easy and fast import of PG5 symbols, alarm lists and HDLog configuration into the Saia PCD® Supervisor.
- Native S-Bus over IP driver capable to access PCD devices including serial gateway (Read Write PCD media, Alarming and HDLog integration).
- HTML5 compliant web framework for full smart device compatibility.
- Supports an unlimited number of users over the Internet / Intranet with a standard web browser, depending on the host PC resources.
- Optional enterprise-level data archival using SQL.
- "Step by step documented history" of database changes, database storage and backup, global time functions, calendar, central scheduling, control and energy management routines.
- Sophisticated alarm processing and routing, including email alarm acknowledgment.
- Access to alarms, logs, graphics, schedules and configuration data with a standard web browser.
- Password protection and security using standard authentication and encryption techniques with optional security supported via an external LDAP connection.
- HTML-based help system that includes comprehensive on-line system documentation.
- Provides online/offline use of the Niagara Framework Workbench graphical configuration tool and a comprehensive Java Object Library.
- Optional direct Ethernet based driver support for BACnet IP, EIB/KNX IP, LON IP, Modbus IP master and slave, M-Bus IP, SNMP and OPC client; additional point blocks for each driver may be purchased - see page 3.
- Enhanced BACnet utility for point propriety and EDE import wizard to engineer BACnet system.
- Saia PG5® icon gallery static palette available (SVG).
- BACnet driver with server and client support. C-Bus, Modbus IP, LON IP, MBUS, KNX IP, OPC and SNMP drivers supported by open point license.
- Read / write access to BACnet, C-Bus and Niagara schedules. Global schedule and calendar functions "Scheduling" on Supervisor support to manage device without internal schedule function.
- Capable of integrating Saia PCD® Supervisor BACnet and Niagara controllers, third party devices and internet protocols into a centralized software platform that is designed to manage buildings at corporate level (to handle a huge amount of data).

### **COMPATIBILITY**

Saia PCD® Supervisor provides connectivity to a Saia PCD® system. Compatibility with PG5 projects starting with versions than V3.0.

### **Supported PCD devices:**

Saia PCD® with Ethernet Interface for direct connection to Niagara or RS-485 interface for connection to a gateway station, where the gateway station does have an Ethernet connection to Niagara:

- ▶ PCD1.M0160E0
- ► PCD1.M2xx0
- ► PCD2.M4x60
- ► PCD2.M5xx0
- ► PCD3.Mxxx0
- ► PCD7.D4xxxT5x

PCD's with RS-485 interface for connection to a gateway station, where the gateway station does have an Ethernet connection to Niagara:

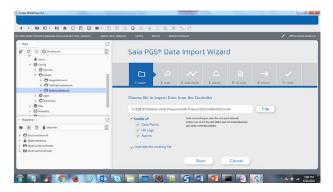
► PCD1.G/F/Wxxx-xx5 with RS-485 (as slave of a gateway station)

### Access to the following PCD resources:

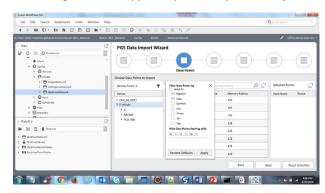
- ► Inputs
- ▶ Outputs
- ► Flags
- ► Register
- ► Data block
- ▶ Text
- ► Timer
- ► Counter
- ▶ Alarming▶ HDLog
- ► PCD Status
- ▶ PCD Clock▶ PCD Firmware

#### Saia PG5® Data Import Wizard:

 Saia PG5® Data Import Wizard allows the easy and fast import of symbols, alarm lists (incl. alarm texts) and HDLog lists defined in PG5 projects into the Saia PCD® Supervisor

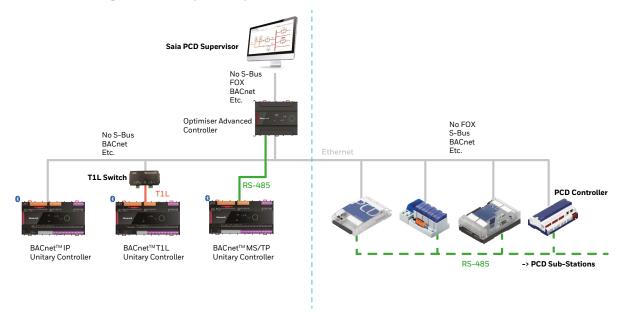


▶ Filtering functions support import of only selected symbols



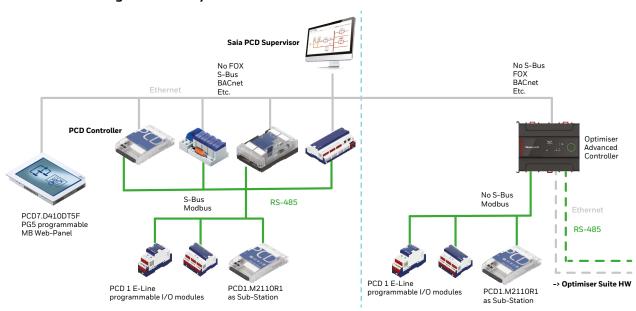
### **SYSTEM ARCTITECTURE**

# Focus on Enhancing Connectivity with Optimizer Suite Hardware



▶ Ethernet communication to Sub-PCD Stations over RS-485 which are connected behind a gateway.

# Focus on Enhancing Connectivity with Saia PCD Hardware



▶ Ethernet communication to Sub-PCD Stations over RS-485 which are connected behind a gateway.

### **ORDER CODES**

The Saia PCD® Supervisor license scheme is based around a point count. A point is a single item of information that is stored into the Saia PCD® Supervisor database and in the case of the Saia PCD® system includes Flags, registers, Inputs, Outputs, etc., that you may want to add into Saia PCD® Supervisor.

There are four main categories in Saia PCD® Supervisor - basic license, basic licenses with genuine SBC points, genuine SBC points extensions, and open points extensions:

### **Basic license**

These licenses are the SBC basic license (No S-Bus points, OPEN points, Nodes) that can be extended by any point or node license. Point discovery are embedded features available through the available import wizards. The ordering code are listed below:

**PCD8.SUP-BASIC** Saia PCD® Supervisor basic license (No S-Bus points, OPEN points, or Nodes).

### Basic license with genuine S-Bus points

These are points controlled by SBC manufactured controllers (PCD1, PCD2, PCD3 and PCD7) and accessed using the S-Bus Protocol. For this category of device the license is sized on the points you want to monitor. Point discovery is an embedded feature available through the Saia PG5® Import Wizard embedded in the S-Bus driver. SBC devices and networks are not counted for licensing purposes. The main ordering codes are listed below:

PCD8.SUP-500	Saia PCD® Supervisor basic package including SBC S-Bus driver and 500 points database size
PCD8.SUP-2500	Saia PCD® Supervisor basic package including SBC S-Bus driver and 2,500 points database size
PCD8.SUP-10000	Saia PCD® Supervisor basic package including SBC S-Bus driver and 10,000 points database size
PCD8.SUP-25000	Saia PCD® Supervisor basic package including SBC S-Bus driver and 25,000 points database size
PCD8.SUP-50000	Saia PCD® Supervisor basic package including SBC S-Bus driver and 50,000 points database size
PCD8.SUP-100000	Saia PCD® Supervisor basic package including SBC S-Bus driver and 100,000 points database size

In case more points are needed to meet system requirements, the desired Saia PCD® Supervisor database size can be reached with any combination of Starter Kit and the following Point Extensions.

#### **Basic license with Nodes**

These licenses are the SBC basic license including Node connections (No S-Bus points, OPEN points) that can be extended by any point or node license. Point discovery are embedded features available through the available import wizard. The ordering code are listed below:

PCD8.SUP-1N	Saia PCD® Supervisor, 1N Basic license
PCD8.SUP-5N	Saia PCD® Supervisor, 5N Basic Licenses
PCD8.SUP-10N	Saia PCD® Supervisor, 10N Basic licenses

### Genuine S-Bus points extensions

PCD8.SUP-100EXT	Saia PCD® Supervisor additional 100 SBC database points
PCD8.SUP-2500EXT	Saia PCD® Supervisor additional 2,500 SBC database points
PCD8.SUP-5000EXT	Saia PCD® Supervisor additional 5,000 SBC database points
PCD8.SUP-15000EXT	Saia PCD® Supervisor additional 15,000 SBC database points
PCD8.SUP-50000EXT	Saia PCD® Supervisor additional 50,000 SBC database points

### Open points extensions

These are points from open protocol equipped devices or subsystems that you wish to integrate straight into Saia PCD® Supervisor. The Saia PCD® Supervisor open driver packs include a selection of standard drivers that you can select to be used to perform head end integration.

Standard drivers are: BACnet IP, EIB/KNX IP, LON IP, Modbus IP master and slave, M-Bus IP, SNMP and OPC client. Open driver packs ordering codes are listed below:

PCD8.SUP-500OPEN	Extend base license with additional 500 open protocols points
PCD8.SUP-2500OPEN	Extend base license with additional 2,500 open protocols points
PCD8.SUP-5000OPEN	Extend base license with additional 5,000 open protocols points
PCD8.SUP-10000OPEN	Extend base license with additional 10,000 open protocols points
PCD8.SUP-25000OPEN	Extend base license with additional 25,000 open protocols points
PCD8.SUP-50000OPEN	Extend base license with additional 50,000 open protocols points

Please note that open protocol license management is delivered in a way that as soon as you reach the limit for point count customers need to request license upgrade accordingly.

### Maintenance upgrade options

Saia PCD® Supervisor basic packages include an 18 months maintenance and free upgrade package. This can be extended by purchasing one of the following maintenance upgrade options:

PCD8.SUP-MNT1	Saia PCD® Supervisor, 1 year maintenance fee for Point Basic license
PCD8.SUP-MNT3	Saia PCD® Supervisor, 3 year maintenance fee for Point Basic license
PCD8.SUP-MNT5	Saia PCD® Supervisor, 3 year maintenance fee for Point Basic license
PCD8.SUP-MNT1-1	Saia PCD® Supervisor, 1 year maintenance fee for 1 Node Basic license
PCD8.SUP-MNT1-10	Saia PCD® Supervisor, 1 year maintenance fee for 10 Node Basic license
PCD8.SUP-MNT3-1	Saia PCD® Supervisor, 3 year maintenance fee for 1 Node Basic license

### ORDER CODES

PCD8.SUP-MNT3-10 Saia PCD® Supervisor, 3 year maintenance fee for 10 Node Basic license
PCD8.SUP-MNT5-1 Saia PCD® Supervisor, 5 year maintenance fee for 1 Node Basic license
PCD8.SUP-MNT5-10 Saia PCD® Supervisor, 5 year maintenance fee for 10 Node Basic license

### Extended connectivity options

PCD8.SUP-1N-UP Upgrade connectivity to Advanced Controller / another Supervisor -> Add 1 Node to any basic license
PCD8.SUP-10N-UP Upgrade connectivity to Advanced Controller / another Supervisor -> Add 10 Nodes to any basic license

#### **Extended support options**

PCD8.SUP-DB-CSVExtend the capability for the supervisor to interact with Microsoft ExcelPCD8.SUP-DB-MYSQLExtend the capability for the supervisor to communicate with MySQL ServerPCD8.SUP-DB-ORCLExtend the capability for the supervisor to communicate with Oracle ServerPCD8.SUP-DB-SQLExtend the capability for the supervisor to communicate SQL server

PCD8.SUP-JSON Extend the capability for the supervisor to enable JSON Toolkit for Supervisor (Valid SMA Required)

**PCD8.SUP-HTTP** HTTP service interaction as web services and RESTFul API

**PCD8.SUP-FID** Extend the capability for the supervisor to interact with Micros Fidelio IP Driver.

### Video integration options

PCD8.SUP-MLS-16 Milestone Driver to connect 16 Camera Devices
PCD8.SUP-MAXP-16 Maxpro Driver to connect 16 Camera Devices
PCD8.SUP-AXIS-16 Axis Driver to connect 16 Camera Devices

### **Energy Management options**

PCD8.SUP-EM25
PCD8.SUP-EM50EXT
PCD8.SUP-EM100EXT
PCD8.SUP-EM500EXT
Saia PCD® Supervisor EM license for additional 1000 meter points
Saia PCD® Supervisor EM license for additional 5000 meter points
Saia PCD® Supervisor EM license for additional 5000 meter points
Saia PCD® Supervisor EM license add 1 weather location

### **Analytics Options**

PCD8.SUP-NA-250 Niagara Analytics Framework license for 250 analytic points
PCD8.SUP-NA-1000 Niagara Analytics Framework license for 1000 analytic points
PCD8.SUP-NA-10000 Niagara Analytics Framework license for 10000 analytic points

### Security options

PCD8.SUP-LDAP
PCD8.SUP-ESIG-1000
PCD8.SUP-ESIG-UNL
PCD8.SUP-ESIG-UNL
PCD8.SUP-ESIG-UNL
PCD8.SUP-ESIG-UNL
PCD8.SUP-ESIG-UNL
PCD8.SUP-LDAP
Provides interface to integrate active Directory/LDAP
E-Signature Application with 1'000 secured points
E-Signature Application with unlimited secured points

PCD8.SUP-ESIG-UP1K E-Signature Application upgrade to add 1'000 additional secured points

### Cloud connection options

PCD8.SUP-CLO-500 Niagara Cloud Honeywell Sentience Driver 500 points
PCD8.SUP-CLO-2500 Niagara Cloud Honeywell Sentience Driver 2500 points
PCD8.SUP-CLO-10000 Niagara Cloud Honeywell Sentience Driver 10000 points

### Partner license agreements

PCD8.SUP-NAA-MON Saia PCD® Supervisor monthly licence\*

PCD8.SUP-NAA-STK1 Saia PCD® Supervisor Starter kit, annual agreement and 1 engineering license Saia PCD® Supervisor Starter kit, annual agreement and 5 engineering licenses

PCD8.SUP-NAA-RENSaia PCD® Supervisor annual agreement renewalPCD8.SUP-NAA-ENGSaia PCD® Supervisor 1 additional engineering license.

<sup>\*</sup> PCD8.SUP-NAA-MON licenses can only be purchased by new partners. From purchase's month until renewal. You must always purchase as many monthly licenses as you need for the period until November 30th. After November 30th, they will be renewed for 1 year with the normal PCD8.SUP-NAR.EN. Engineering licenses can be added to the Starter Kit by order he needed amount of PCD8.SUP-NAA-ENG.

# PLATFORM REQUIREMENTS

Saia PCD® Supervisor will run on the following operating systems:

Windows 10 (64-bit), Windows 11 (64-bit) Windows Server 2016 Windows Server 2019 (64-bit)

Your PC must comply with the minimum specification for the installed operating system as specified by Microsoft.

In addition to meeting the requirements for the operating system Saia PCD® Supervisor requires the following:

Processor: Intel® Xeon® CPU E5-2640 x64

(or better), compatible with dualand quad-core processors

Memory: 6 GB minimum, 8 GB or more re-

commended for larger systems

Free Hard Drive Space : 4 GB minimum, more recommended

depending on archiving requirements.

10 GB recommended for any supervisor

Display: Video card and monitor capable

of displaying 1024 x 768 pixel resolution, 1080p (1920 x 1080) minimum resolution recommended

Network Support : Ethernet adapter

(10/100 MB with RJ-45 connector)

Connectivity: Full-time high-speed ISP connection

recommended for remote site access (i.e., T1, ADSL, cable modem) and IPv6 compliant

If enterprise-level data archiving is required (optional), one of the following compatible database applications will need to be installed:

> MS SQL Server 2012, MS SQL Server 2016, MS SQL Server 2017, MS SQL Server 2019

MySQL Server 5.7, MySQL Server 8.0,

Oracle 12c, 18c, 19c.

## **INSTALLATION**

Saia PCD® Supervisor is available as a download:

https://sbc-support.com/en/product-index/saia-pcd-supervisor/

 $Once downloaded \ to \ your \ PC/laptop \ a \ step-by-step \ installation \ program \ will \ guide \ you \ through \ the \ installation \ process.$ 

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