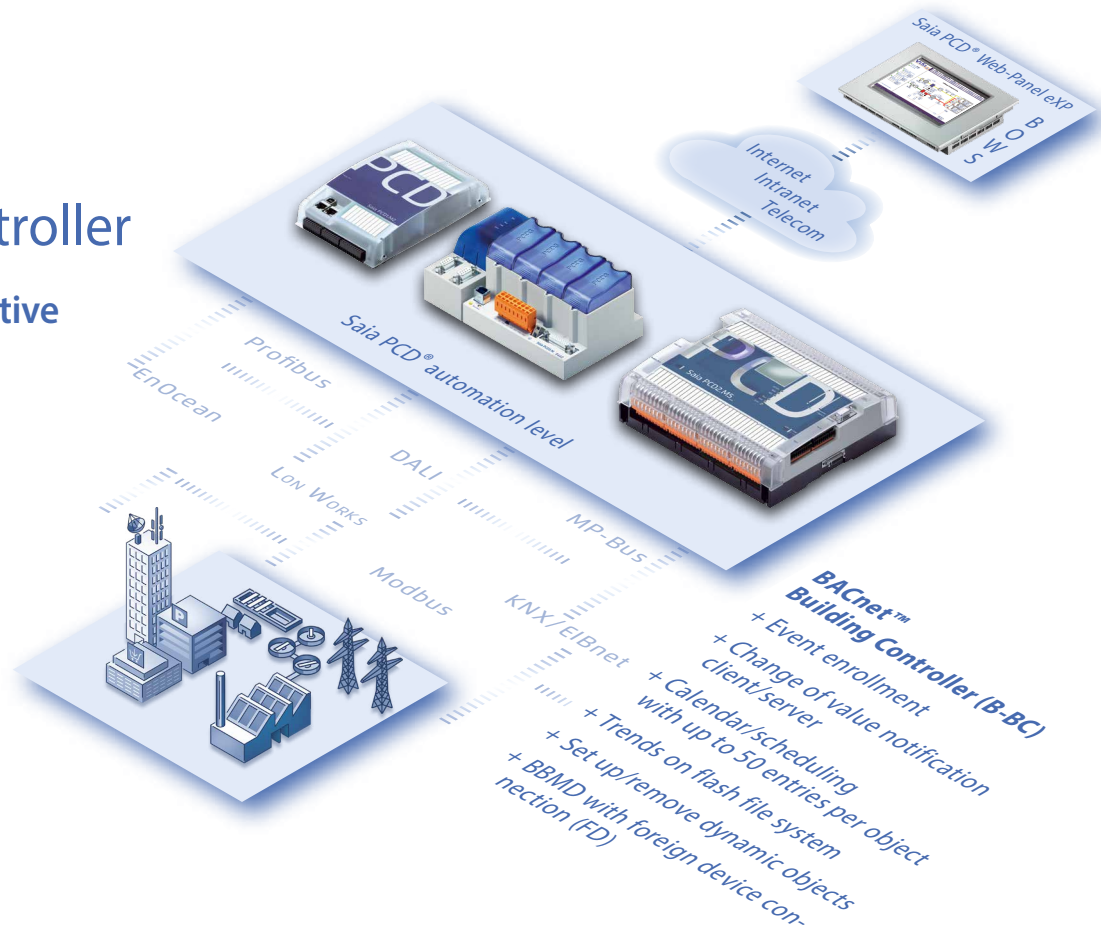


BACnet™ Building Controller

Innovation with native
software



Today, no-one could imagine modern building automation without BACnet™, the building automation standard. Saia Burgess Controls, with its Saia PCD3 product family and the Saia PCD2.M5, offers powerful BACnet™ building controllers (B-BC) in line with ANSI/ASHRAE 135-2004.

The number of objects implemented by these BACnet™ controllers far exceeds the B-BC profile. BACnet™ building controllers are therefore among the most powerful on the market.



BACnet™ certified

Features

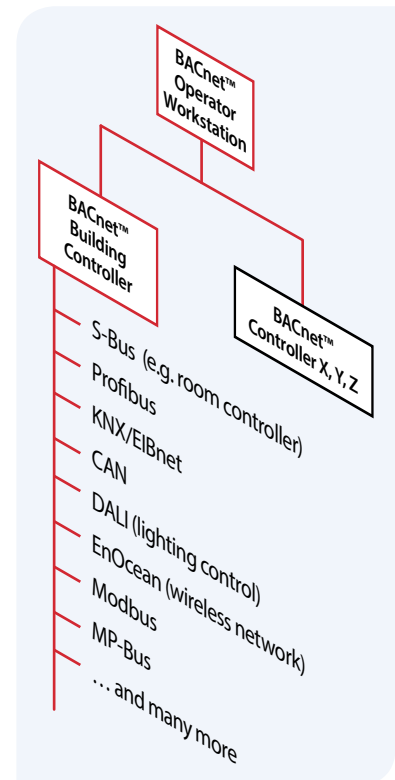
- ▶ BACnet™/IP server and client
- ▶ BACnet™/PTP on RS232 basis (inc. half-router functionality for modem)
- ▶ BACnet™/IP Broadcast Management Device (BBMD) supports foreign device registration (FD)
- ▶ Up to 1200 BACnet™-objects per controller
- ▶ Schedule, calendar, event enrollment, alarms, command and more
- ▶ Integration of other open protocols, like LonWorks®, KNX/EIBnet, Profibus, MP-Bus etc.
- ▶ Simple, free programming through Saia PG5® Controls-Suite

Optimum integration through support for all open standard protocols

BACnet™ building controllers are general purpose, open, automation stations capable of seamless integration into a BACnet™ network. Their functional scope sets new benchmarks in the European market. Rigorous application of the currently valid BACnet™ standard 135-2004 is forward-looking and protects any investment. Apart from communication via BACnet™, it is of course possible to use all existing open protocols, as well as foreign system connections. By routing widely differing networks in this way, the application spectrum with Saia PCD® is almost unlimited.

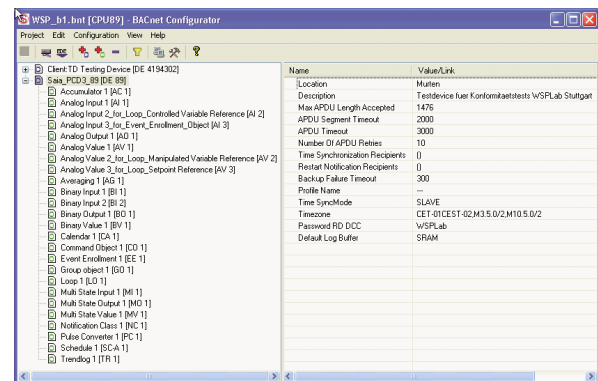
Adapting existing Saia PCD2 systems

With the new PCD2.M5xxx, it is also possible to modernize old Saia PCD2 systems without changing the I/O modules. Old installations can therefore be economically ported into the BACnet™ network.



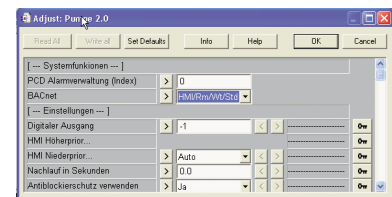
Easy engineering

Applications can be produced in the usual way with the PG5 Controls-Suite programming tool. It contains a BACnet™ configurator for total freedom when setting the parameters of BACnet™ objects. Every conceivable task can therefore be solved. Clearly structured dialogues ensure clarity in the setting of parameters for the scheduler, trends, alarms, etc.



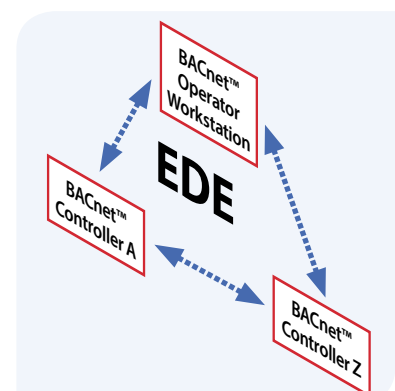
BACnet™ at the push of a button

The new application FBox library DDC Suite V2.0 is even more convenient for system integrators. With BACnet™ at the push of a button, BACnet™ is configured automatically when the user program is produced. All the necessary adjustments are made inside the HEAVAC application FBoxes.



BACnet™ plug and play – smooth integration into existing networks through EDE exchange files

The BACnet™ configurator in the PG5 allows EDE files to be created and imported without difficulty. This means all BACnet™ objects can be transferred in electronic form to other controllers, or to a management system. When users import EDE files from another BACnet™ controller, the imported objects will be immediately available in the client for use in the program. This allows even complex communications tasks to be handled quickly and without errors.



Convincing performance features

BACnet™ Objects



Up to 1200 BACnet™ objects per automation system for more power

A BACnet™ Building Controller from SBC offers much more than the standard demands. Alongside the usual objects (such as analogue, digital, mean value, counters and pulse converters) there are also complex objects, such as schedulers, calendars, alarm logs, event logs and trend logs.

Data Sharing



Data communication

Interoperability and speed are central requirements for successful BACnet™ integration. SBC supports this actively through simultaneous client and server mode. Data can be exchanged individually, in a block, or after modifications.

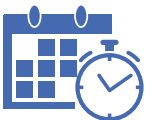
Alarm and Event



Intelligent alarm system reduces maintenance costs

With a B-BC from SBC, maintenance staff will be promptly informed of system status, regardless of location or time of day. The «intrinsic reporting» method allows fast, easy integration of status changes or infringements of limiting values. «Algorithmic alarms» enable complex conditions to be verified, while «event enrollment» allows any chosen property of whatever BACnet™ object in the network to be monitored.

Calendar, Scheduler



Time and calendar functions

The SBC B-BC supports the diverse capabilities of modern SCADA systems to define time programs flexibly and openly through as many switching points and exceptions as desired per day or time period.

Trend log



Data registration in SD flash memory

The BACnet™ Building Controller from SBC stores history data securely and speedily in SRAM or on the flash file system. In addition to BACnet™, access is supported via FTP standard tools. This opens up new possibilities for applications with or without telemaintenance. The individual user can define, for every trend line, how often to store data, how much of it to store and where, regardless of whether the storage required is fast SRAM registration or long-term data capture, either economically in the integral flash (up to 1 MB) or on optional SD flash memory (up to 4 GB).

Device/Network Management



Everything under control

A BACnet™ Building Controller from SBC is easily integrated into BACnet™ infrastructure, thanks to a variety of management services. Examples that stand out include, in device management, time synchronisation (UTC) either actively as master or passively as slave, full program backup/restore, controller reboot etc. Network management supports BACnet™ on IP, BACnet/PTP on RS-232 (including half-router functionality for modem), BACnet™ data link layer, BACnet™/IP broadcast management device (BBMD) and foreign device registration (FD).

Reference:

Hansa-Klima relies completely on SBC web technology and BACnet™

To date, Hansa has supplied over 5000 air-conditioning units with Saia PCD controllers to Deutsche Telekom Immobilien GmbH.

Thanks to web technology, automation steps can be modularized and standardized. Teleservice and telemaintenance are automatically included, for example from Hansa's own headquarters.

In large installations, it is essential for individual air-conditioning units to refer to a building management system. At this level, BACnet™ has established itself world-wide as the communications standard.

Saia PCD® controllers have integral web servers and «speak» fluent BACnet™.



Central air-conditioning unit with SBC Windows®CE Web-Panel as building management technology

SBC control technology is just as suitable for Hansa's large, central air-conditioning units with SBC Windows®CE Web-Panels as it is for the smaller, Slim-Line units.

The individual user interfaces of air-conditioning units are not stored centrally in building management technology, but as web visuals in the web servers of the SaiaPCD® controller.

This means that the building management technology only has to be linked to the controllers of individual air-conditioning units, resulting in significant savings on project planning and commissioning.



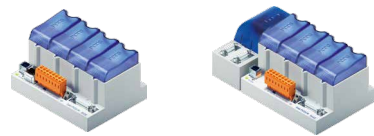
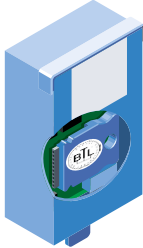


Windows®CE 10" Web-Panel: Visualization is stored in PCD web servers



Available space is minimal in Slim-Line. The flat Saia PCD1 is an ideal fit. On-site operation via Saia PDC7.D231

Ordering information

Compatible automation systems	Type	Description	Weight
	PCD7.R560	For PCD3.M5 CPU + PCD2.M5 CPU 2 MByte flash card with BACnet™ option	 7 g
	PCD7.R561	2 MByte flash card with BACnet™ option, 1 MByte file system and 1 MByte program backup	
	PCD3.R560	For PCD3.M3 and PCD3.M5 CPU on E/A-Steckplatz 2 MByte flash module with BACnet™ option	 87 g
	PCD3.R561	2 MByte flash module with BACnet™ option, 1 MByte file system and 1 MByte program backup	

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