Modular Building Solutions

More Information: mbs-solutions.de
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MBS has been an innovator in industrial and building automation for more than 30 years, delivering state-of-the-art hard- and software and assisting our customers in solving their technical needs.

The MBS Universal gateways are based on the same product platform and therefore offer an extraordinary degree of versatility and flexibility for adapting to changing requirements – an advantage that results in especially low total costs. In addition, MBS offers full service, customized software and hardware development, OEM products, consulting, training and support and on-site commissioning.

MBS has been an active member of the BACnet Interest Group Europe (www.big-eu.org) since 1999 and actively supports the marketing (WG-M) and technology (WG-T) working groups and the advisory board with development and marketing activities relating to BACnet.

As manufacturers we offer you comprehensive expertise and a wide selection of products that meet all your requirements - Made in Germany.

Learn more ☞
We earn our customers’ trust with reliable products and services, timely delivery and perfect support for their business-critical applications.

In order to meet your expectations, MBS fosters a culture of innovation and responsibility, thereby ensuring continuous improvement of our products and services through our quality management system.
THE ALL-ROUND CAREFREE PACKAGE

“Service” is a stretchable concept, and everyone connects something different. This makes it all the more important to have certainty in building automation. Gateway solutions, which are a key component in building technology, are critical for projects. Failures of hardware or software can not afford in the building control technology, because of the data flow and the connected processes - profan said - money.

The MBS expertise is not only to develop robust, flexible and powerful hardware for building automation. With our service we offer preliminary consultation and implementation of solutions, a comprehensive service and support program that supports our customers in every conceivable problem around their building automation.

- Development
- Commissioning
- Laboratory | Project planning
- Seminars
- Support
- Test equipment service

Learn more
X-Series Gateways

The MBS Universal Gateways serve as the communication interface for the various communication protocols in industrial and building automation. All important communication protocols are available, the MBS Universal Gateways offer the right solution for almost every requirement.

MBS Gateway Configurator

Are you looking for a translator from one communication protocol to another?

With its numerous available communication protocols the MBS Gateway offers for nearly every requirement the right solution. On request, proprietary protocols can be implemented. Select your communication protocols and data points as required. You can send them the gateway recommendation directly from the configurator as a request.

The MBS Universal Gateways offer unique flexibility and enable fast cabling and connection. The integrated e.g. KNX, LON, M-Bus or PROFINET-adapter enabling faster connection to serial or network-based communication protocols.

Learn more
The A-Series

The MBS Universal Gateway maxi | Mk II from the MBS A Series for demanding building automation applications: smaller dimensions and a maximum of 40,000 data points.

maxi | Mk II
Operators of large properties need plenty of space in which to set up the necessary infrastructure. So it is ideal if the individual technical elements in an automation system take up as little room as possible.

The maxi | Mk II: a communication interface with impressive features. Small in size and with a maximum of 40,000 data points, it is the most compact and yet the most powerful gateway currently on the market. In addition to the common bus protocols such as KNX, PROFIBUS and LON, manufacturer-specific communication protocols can also be added on request.

Router

Like media converters, the MBS Universal BACnet Router connect BACnet networks of different technologies such as BACnet/IP, BACnet Ethernet, BACnet MS/TP and BACnet over LonTalk.

UBR-01 | Mk II
The UBR-01 enables the implementation of the BACnet network topologies ISO 8802-2, BACnet / IP and MS / TP.

UBR-02
The UBR-02 routes packages between the MS/TP media (RS485), Ethernet and IP, which can be linked to create a common network. It can link two separate IP areas with two network connections.

UBR-LON
Connects BACnet over LonTalk to BACnet/IP. It gives property operators an inexpensive way of connecting facility engineering based on BACnet over LonTalk to the modern IP technology.
ALL MAJOR COMMUNICATION PROTOCOLS ARE AVAILABLE

With their wide range of available communications protocols, MBS gateways offer the right solution for almost every requirement. Manufacturer-specific protocols can also be implemented on request. The gateways are configured using text files. These are transferred from an integrated web server to the gateway via a web browser. The configuration is permanently saved on the gateways – and optionally as a backup in the dropbox (Internet connection required).
Communication between a SIMATIC SPS (S7-CPU) and a MBS Gateway

Are you looking for an application description for communication between a SIMATIC SPS and an MBS gateway model in a BACnet network? For information on the configuration of SIMATIC SPS and PROFINET, see the Siemens Support page or download the corresponding information there.

APPLICATION EXAMPLE
DALI

This application example demonstrates how to configure communication between a SIMATIC SPS and a DALI network with a gateway project.

Learn more »

APPLICATION EXAMPLE
BACnet

This application example demonstrates how to configure communication between a SIMATIC SPS and a BACnet network with a gateway project.

Learn more »

APPLICATION EXAMPLE
M-Bus

This application example demonstrates how to configure communication between a SIMATIC SPS and a M-Bus network with a gateway project.

Learn more »

APPLICATION EXAMPLE
KNX

This application example demonstrates how to configure communication between a SIMATIC SPS and a KNX network with a gateway project.

Learn more »

Communication between PAC measuring devices and an MBS Gateway

Are you looking for an application description for communication between a PAC measuring device and an MBS gateway model in a BACnet network?

For information on the configuration of a PAC measuring device and PROFINET, see the Siemens Support page or download the corresponding information there.

APPLICATION EXAMPLE
Modbus TCP to BACnet for PAC measuring devices

This application example demonstrates how to configure communication between a PAC measuring device and a BACnet network with a gateway project.

Learn more »
SOFTWARE SOLUTIONS

MBS SOFTWARE SOLUTIONS FOR THE INDUSTRIAL AND BUILDING AUTOMATION

**BE**
BACeye

The “Swiss army knife” for building automation. Visualization and analysis of BACnet networks.

Learn more ›

**BTF**
BACnet TEST FRAMEWORK

This reliable, automated tool makes pre-testing faster, less labor-intensive, and therefore more cost-effective.

Learn more ›

**BPA**
BACnet PROTOCOL ANALYZER

Diagnostics and log records including a complete BACnet decoding.

Learn more ›
"BACnet-2-OPC" transmits BACnet data from building automation to a central management system via OPC UA or DA.

Develop DALI-compatible devices according to the DALI 2 standard within a very short time and reduce your costs significantly.

Data will be transferred from connected M-Bus meters to OPC-based-applications.
More and more operators are using BACnet as a proven protocol for smooth communication between building automation system components.

A certificate and the BTL logo document that there is in fact such smooth component interplay. The certificate is used to identify products which have passed testing at an accredited testing laboratory, like those operated by Krefeld-based company MBS GmbH.

**Standard-setting certified products**

Manufacturers are not legally obliged to have their BACnet products certified. Frequently, however, in tenders for public real estate the properties’ systems must bear the BTL label (BACnet Testing Laboratories), without exception. This label is the seal of quality of both BACnet International and the European BACnet Interest Group, and is for all intents and purposes a must to be able to compete with other market participants. For many tenders in Germany and some in Austria, an attestation must commonly also be provided from AMEV, the Working Group for Mechanical and Electrical Engineering of State and Municipal Administrations. A certificate of conformity from an accredited BACnet testing laboratory is an integral part of this attestation from the start.

It is thus entirely accurate to say that manufacturers of systems/equipment that conform with the ISO 16484-5 standard enjoy a better competitive position. It is no coincidence that prominent German producers have qualified to display the BTL logo, and this has established it as a market standard.
The innovation factor

New developments, innovative features, standard revisions and other technical factors can require a trip to the testing laboratory. An issued certificate is valid for a period of five years. Hardware improvements and software updates implemented during that period require additional testing of the new functionalities. Equipment which has not been upgraded still has to be re-tested upon elapse of the five-year period.

In such cases, the product is sent to one of the four test labs worldwide for conformity testing. The entire functional range is covered here, from simple sensors and actuators, application-specific controllers (B-ASC, B-AAC), freely-programmable DDC (B-BC), gateways (B-GW) and routers (B-RTR) to operating equipment, building control systems and workstations (B-OD, B-OWS, B-AWS). The testing process is as defined in the official BACnet Test Package, consisting of the BTL Testing Plan and Test Standard ISO 16484-6.

The German Accreditation Body, DAkkS, regularly audits labs in Germany to ensure conformity with laboratory standards and quality requirements. The DAkkS certifies lab competency to carry out conformity testing as the prerequisite for equipment certification.

Quality with no compromises

Testing is generally conducted under BTF, the BACnet Test Framework developed by MBS GmbH. This framework comprises software that automates a large part of the testing procedure, which can take several months even with this automation, depending on the scope of the equipment’s functionalities. If this seems like an involved and burdensome process, you should consider the substantial benefits it affords.

First of all, conformity testing ensures quality. A manufacturer can then be assured that its product works in accordance with the standard and properly interfaces with other BACnet equipment. Secondly, equipment that has passed testing communicates with other components (which also bear the BTL logo) on an out-of-the-box basis after installation in a building automation system. Thirdly, support costs are significantly reduced, as system failures and disappointed customers become a thing of the past.

Choosing the optimal service provider

Any company, located anywhere, can have its products tested at any accredited testing lab. Testing is always carried out on the basis of the official BACnet Test Package. Upon successful completion, permission to use the BTL logo is granted and the company is entered in the BTL Certification Listing, which is the international register for all products which are documented as BACnet-conforming.

The service provider selected should be the one most suitable for meeting your particular needs. MBS GmbH has its own testing laboratory manned by ten experienced employees, which has been accredited by DAkkS since 2012. At this facility, the company deploys its extensive experience as an equipment and software manufacturer for building automation and its twenty years of involvement in international committees. You could even say that MBS has BACnet in its DNA. This means customers benefit from an array of services, which are also available as a complete package. These include development aids for companies getting started, detail-level training on the standard and assistance with product development and implementation.

Your partner for certification... and more

Pre-testing is an available option in case of doubt concerning equipment conformity. Pre-testing is also carried out based on the BTL Test Package but costs substantially less, as in regular lab testing, a single error may for example require multiple test rounds. Such official conformity testing is of course also carried out at the MBS testing lab.

The lab experts are the ones to turn to for assistance with any BACnet-related matters, such as support with error analysis and log file evaluation. MBS is also a reliable partner for help in dealing with certification bodies to clarify certain issues.

Please contact us!
DO YOU NEED SUPPORT DURING COMMISSIONING?

The provision of building services is more than just the installation and configuration of hardware. The requirements for each project are unique and must be considered when developing the right solution. With over 25 years of experience and our own gateway commissioning group, we always have a solution for our customers and partners. We ensure that your project is successful from beginning to end.

With hundreds of implementations, we know your challenges and are well-equipped to ensure a smooth implementation process for your project. To ensure that your system works successfully from the very beginning, we configure our hardware for immediate use according to your specifications. Configuration and commissioning are also part of our services. Commissioning is documented at the end in the form of a protocol. Please contact us!
Ensures BACnet protocol conformity

The BACnet stack ensures standard-compliant implementation of the BACnet protocol. Our clients created various applications on the basis of BACnet stack, which got successfully tested by a BACnet testing laboratory.

Develop BACnet compatible applications on all important software platforms

The BACnet stack supports developers in the development of BACnet-compatible applications that run on Linux-, QNX-Windows- and Embedded applications - this applies to both 32-bit and 64-bit applications. The time saved in the development process may be in this case several months.

Fast product development

The CS-Lab BACnet stack: Embedded for microcontrollers supports developers in the implementation of BACnet-compatible applications that run on embedded applications. The time that this saves in the development process can amount to several months.

Your all around care free package for the development of standard compliant BACnet applications.
Contact Information:
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