
VISAM
Smart Solutions
VBASE
Trade-spanning
BUILDING MANAGEMENT SYSTEMS
Building Management
Smart Building
Smart Metering
Building IOT
vbase.net


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Wherever data is collected and processes are visualised and controlled, VBASE is at home.
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VBASE The flexible platform for automation

VBASE. What is it and where can it be used?

In general terms, VBASE is a sector-neutral and highly flexible platform for the automation and digitalisation of industrial plants, machines and buildings.
Especially for building technology, VBASE provides all the tools for setting up trade-spanning Building Management Systems (BMS).

VBASE is freely programmable and manufacturer-independent and can be used for the automation of lighting, heating, air conditioning, shading, etc.
The application possibilities of VBASE are almost unlimited. Wherever data is collected and processes are visualised and controlled, VBASE is at home.

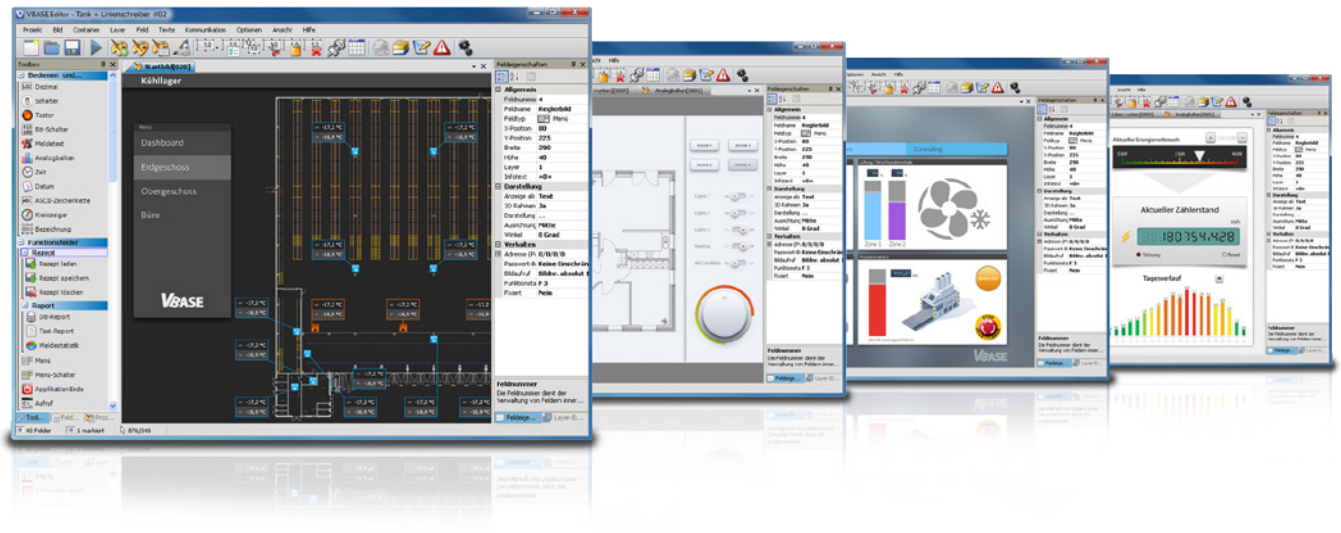
A true multi-talent in building technology.

One of VBASE's greatest strengths is its flexibility and openness to many different technologies. With more than 200 interfaces to control systems, sensors and protocols, the system is independent of individual manufacturers and equipped for communication with all trades.

The tools integrated in VBASE also provide the basis for complex automation projects:
From data acquisition and logging, communication, control and visualisation to evaluation and reporting, VBASE has everything a modern and flexible automation platform needs.

VBASE Smart Building

- Building Management Systeme (BMS)
- Building control technology
- Lighting management
- Energy and resource monitoring
- Energy management data according to ISO 50001
- Environmental and infrastructure monitoring
- Retrofit in existing buildings and facilities



Trade-spanning Building Management Systems

Bye, bye Stand-alone solution.

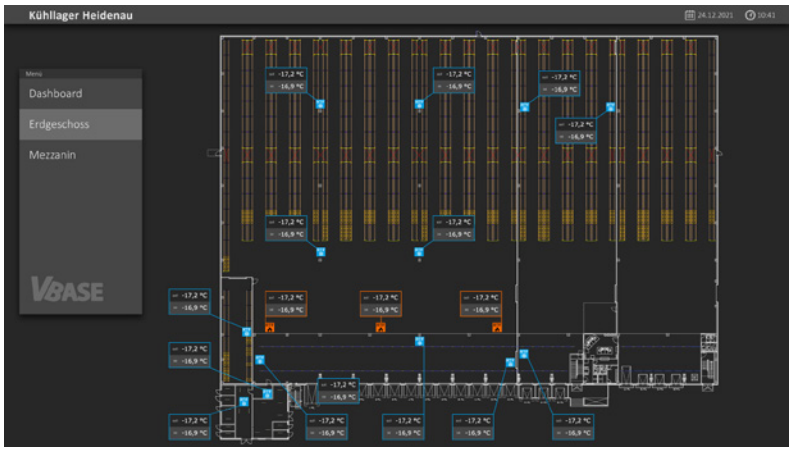
Say goodbye to the flood of „one job" automation solutions that only ever fulfil exactly one purpose. VBASE unites all trades in one system, under one user interface. As a multifunctional and cross-trade Building Management System (BMS), VBASE automates the most diverse trades such as lighting, heating & air conditioning, shading, alarm systems and others. Since VBASE is compatible with around 200 different bus, remote and protocol systems, it does not even stop at system and manufacturer boundaries.

When all trades work together perfectly.

In concrete terms, this means that all system components of a building can be brought together in VBASE. For example, the lighting on a BACnet basis can be automated depending on the alarm system, which is connected via KNX. If the alarm system is activated, VBASE switches the light off and simultaneously regulates the heating down, which is controlled by a PLC. For the exchange of data between the different trades, manufacturer systems and interfaces, VBASE provides the gateway functionality and mediates the data between them. For example, process variables can also be exchanged between BACnet and KNX.

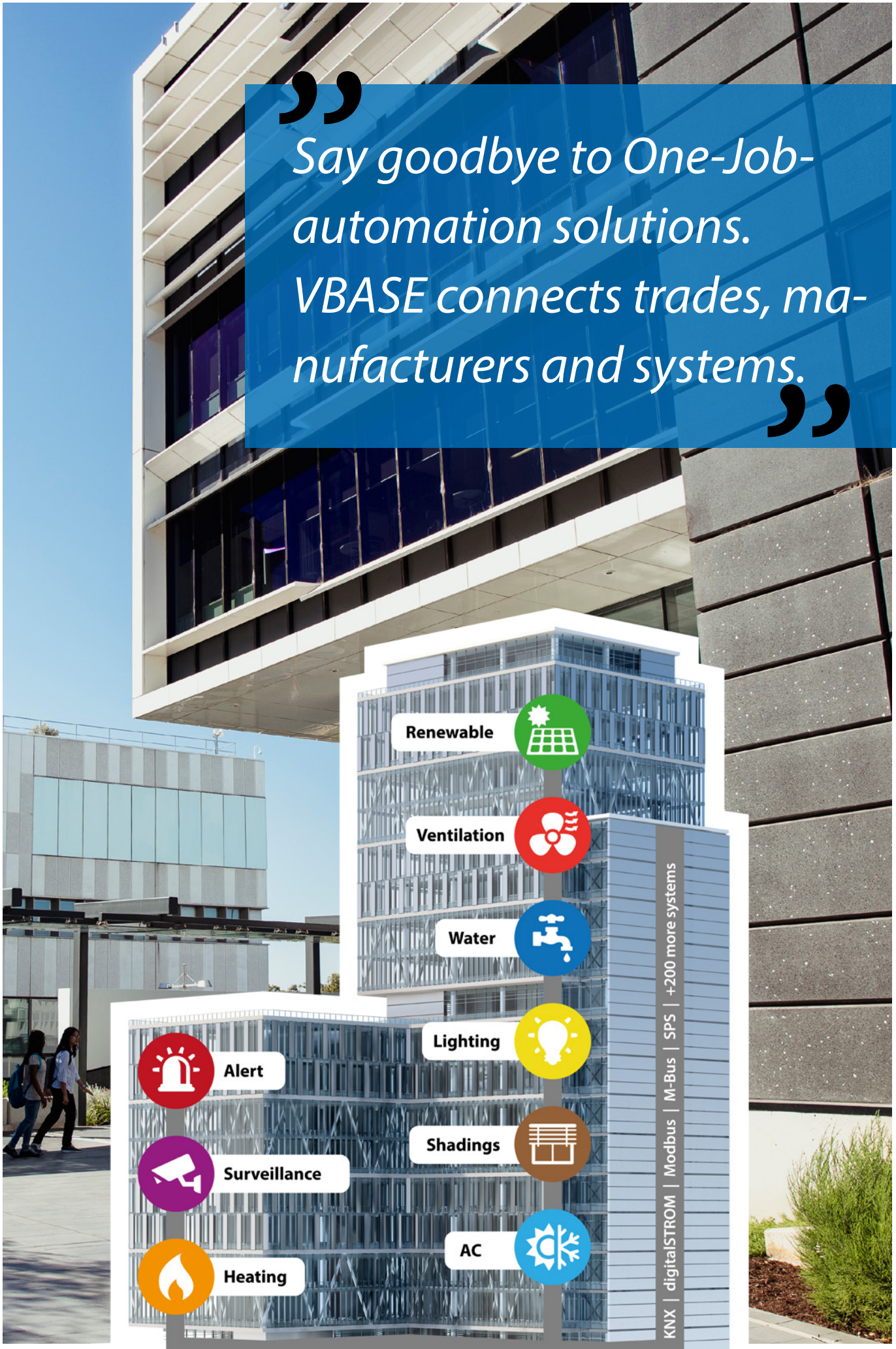
Everything under control, even on the go.

In addition to the local visualisation, VBASE also offers the possibility of mobile access to the Building Management System. For this purpose, VBASE provides a web interface for visualisation and control in the web browser via notebook, tablet PC or smartphone. All trades can also be bundled in one system on a mobile basis. The required HTML pages are generated automatically by VBASE.



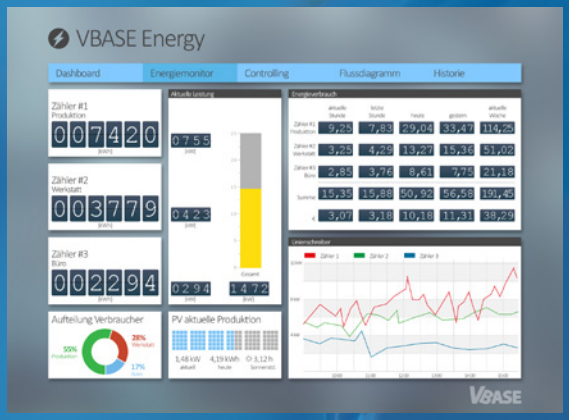
Trade-spanning BMS with VBASE:

- Integration of all trades (lighting, heating/air conditioning, alarm, ventilation, shading, pv, etc.) in one system.
- Data exchange between systems from different manufacturers, protocols and interfaces.
- One visualisation and user interface for all trades.
- Smart automation by linking the trades (e.g. alarm system switches off light and heating).
- Reduced energy and resource consumption.
- Lower operating and maintenance costs through TPM.
- Secure remote access with smartphone or tablet PC to all trades and system components.
- Integration of IOT devices.
- Support of wide-range radio sensors based on LoRaWAN.
- Retrofit in existing buildings and facilities.



Say goodbye to One-Job-automation solutions. VBASE connects trades, manufacturers and systems.

”Tracking of the consumption is the first step to saving.”



Energy and ressource monitoring

Permanent recording and analysis of actual energy consumption.

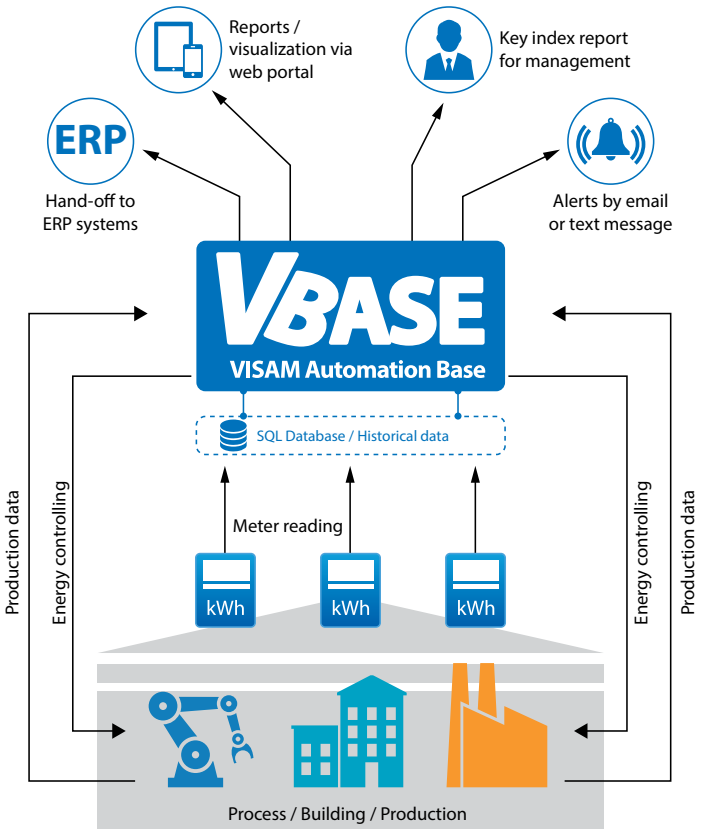
Energy and resource management holds great savings potential for all companies. The basis for this is the detailed recording of the actual consumption, an analysis of the savings potential as well as the permanent and complete monitoring of energy consumption and the checking of compliance with limit values.

Grown, heterogeneous building and system structures usually provide a great challenge, because individual subareas are often managed by different, autonomous control systems. Thanks to the high degree of connectivity and the open system structure, VBASE can automatically collect, analyse and visualise data from a wide variety of trades and energy consumers. For the creation of meaningful key figures, the parallel collection of data that influence resource consumption is a good idea. For example, when analysing the consumption for heat generation in buildings, it is important to compare these consumption values with the values of the outdoor temperature.

Energy data from everyone, for everyone. Everywhere and at any time.

The collected data can be transferred to a database server for archiving and can thus also be evaluated by higher-level systems (ERP system, etc.) at any time. In addition to being displayed on a PC or operating device, the collected information can also be made available for mobile display devices. If limit values are exceeded, the responsible employees can be automatically alerted by the system.

Based on the information obtained, specific energy management can be operated very efficiently for any production facilities or building complexes. Energy monitoring can also include the data of self-generated energy (PV system, CHP, heat pump, etc.) and compare it with the in-house consumption. Recording the consumption of other resources, such as water or gas, is also possible and offers further options for optimising resource consumption.



Controlling is the second stage.

Energy controlling is the consistent complement to energy monitoring, because here the information from monitoring is applied and the savings potential is realised.

Energy consumers that are not needed are automatically reduced or switched off. The key figures obtained from VBASE monitoring can be automatically transferred to the control systems of the consumers in order to regulate them according to demand and thus operate them in an energy-efficient manner.

Testimonial projects
Building automation

For continuous digitalisation and automation, VBASE connects trades and systems of complete office, commercial and industrial buildings. VBASE records building, environmental and consumption data and makes it accessible to all relevant participants.

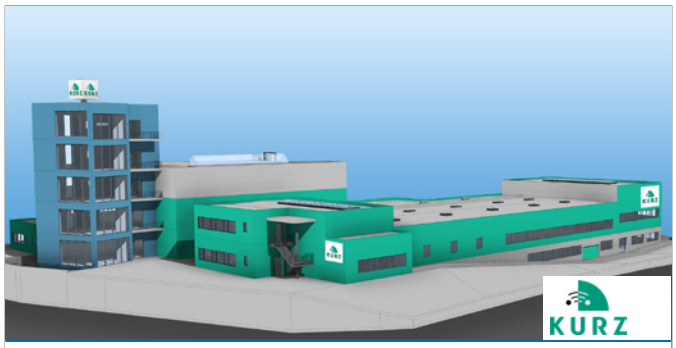
The following list shows a current selection of interesting projects in which VBASE is used, among other things, as a cross-trade BMS system. We would like to thank our customers for kindly allowing us to name the projects.

FREO - Heidenau

Building type:	Cold storage for dairy products
Build year:	2015
Tasks:	Trade-spanning VBASE BMS system
Customer:	Köster GmbH
Client / User:	DSV / ARLA Foods

LDZ Malsfeld

Building type:	Logistik- und Dienstleistungszentrum
Build year:	2017
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management
Customer:	Köster GmbH
Client / User:	Rossmann / Logistik Dienstleistungszentrum GmbH



Produktionsgebäude, Gerlingen

Building type:	Production building
Build year:	2017
Tasks:	Trade-spanning VBASE BMS system, Energy data management, Weather forecast module for concrete core temperature control (TABS)
Customer:	Ingenieurbüro Kohlberger GmbH
Client / User:	Modellbau Kurz GmbH & Co.KG

Modernisierung und Erweiterung Logistikgebäude, Greven-Reckenfeld

Building type:	Logistics and service centre
Build year:	2018
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management, Energy data management
Customer:	Köster GmbH
Client / User:	FIEGE Logistik Stiftung & Co. KG

LDZ Brehna

Building type:	Logistics and service centre
Build year:	2019
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management, Energy data management
Customer:	Köster GmbH
Client / User:	Rossmann / Logistik Dienstleistungszentrum GmbH

Gefahrstofflager Landsberg

Building type:	Storage / logistics
Build year:	2019
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management, Energy data management
Customer:	Köster GmbH
Client / User:	Rossmann Logistikgesellschaft mbH

Bürgerbad Handorf

Building type:	Public swimming bath
Build year:	2020/21
Tasks:	Trade-spanning VBASE BMS system, Lighting management, Energy data management
Customer:	Pellikaan Bauunternehmen Deutschland GmbH
Client / User:	Bürgerbad Handorf gGmbH

Erweiterung Logistikstandort, Ibbenbüren

Building type:	Logistics centre
Build year:	2021
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management, Energy data management
Customer:	KLEBL Bau GmbH
Client / User:	FIEGE Logistik Stiftung & Co. KG

Logistikgebäude, Zülpich

Building type:	Logistics centre
Build year:	2020/21
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management, Energy data management, Temperature / humidity monitoring
Customer:	GOLDBECK International GmbH
Client / User:	Fiege Logistik Stiftung & Co. KG, Fiege Healthcare Logistics GmbH

Logistikgebäude, Gengenbach

Building type:	Logistics centre
Build year:	2020/21
Tasks:	Trade-spanning VBASE BMS system, Warehouse lighting management, Energy data management
Customer:	BREMER AG
Client / User:	FIEGE Logistik Stiftung & Co. KG

VBASE Platform for Automation

Facts & Features:

VBASE Editor. The VBASE Editor is the universal project planning tool for the creation of automation projects. It contains all tools for the development of the visualisation and user interface as well as the underlying application logic. Automation applications for all areas and industries are developed here.

Function blocks. The VBASE function blocks are the fast way to integrate complex and frequently used functions in automation projects. A growing module library with a wide variety of functions is available for this purpose. The modules encapsulate logic or functions and are easy to implement.

VBASE Data field. In VBASE, all process data are exchanged via variables of the VBASE data field. The VDF forms the bridge between all VBASE functions and the connected remote stations. Through this data structure, all process data are available in the system at the same time. The VDF manages up to 2 billion process variables.

Web Remote. On request, VBASE provides a modern web interface for access via smartphone, tablet and all devices with a compatible browser. The VBASE web remote enables the visualisation and control of the automation project and generates the necessary HTML pages automatically.

Smart Building Retrofit. Grown and heterogeneous structures often make the digitisation of existing buildings and facilities difficult. With strong communication capabilities and neutrality towards manufacturers and systems, as well as the use of flexible sensor technology, VBASE simplifies the process of retrofitting.

VTP + VGATE. The VISAM Touch Panel (VTP) and Automation Server (VGATE) are the hardware platforms that perfectly matches to VBASE. They offer robust and scalable hardware as well as many options, for example for mounting. VTP and VGATE are offered as embedded versions with bundled VBASE runtime.

All the information: **www.vbase.net**

Compatible with:

BACnet

BACnet is considered one of the most important network protocols in professional building automation and ensures interoperability between systems and devices from different manufacturers. VBASE has a BACnet browser and client as well as an optional server that allows access to all process variables.

KNX

KNX is a field bus from building automation for the cross-trade and demand-oriented control of lighting, heating, blinds, ventilation and security technology. VBASE supports the KNX-IP protocol and communicates with the KNX components via a KNX-IP router.

Modbus

Modbus is a widespread communication protocol from automation technology that is based on a client/server architecture. Many measurement and control systems in building technology are also equipped with a Modbus interface. VBASE supports the operating modes Modbus TCP and RTU / ASCII (serial).

M-Bus

The M-Bus (Meter-Bus) is a field bus for transmitting energy consumption data. As an efficient system for recording consumption data, the M-Bus is mostly used for reading the consumption data of electricity, heat, gas and water meters as well as various sensors and actuators from different manufacturers.

LoRaWAN

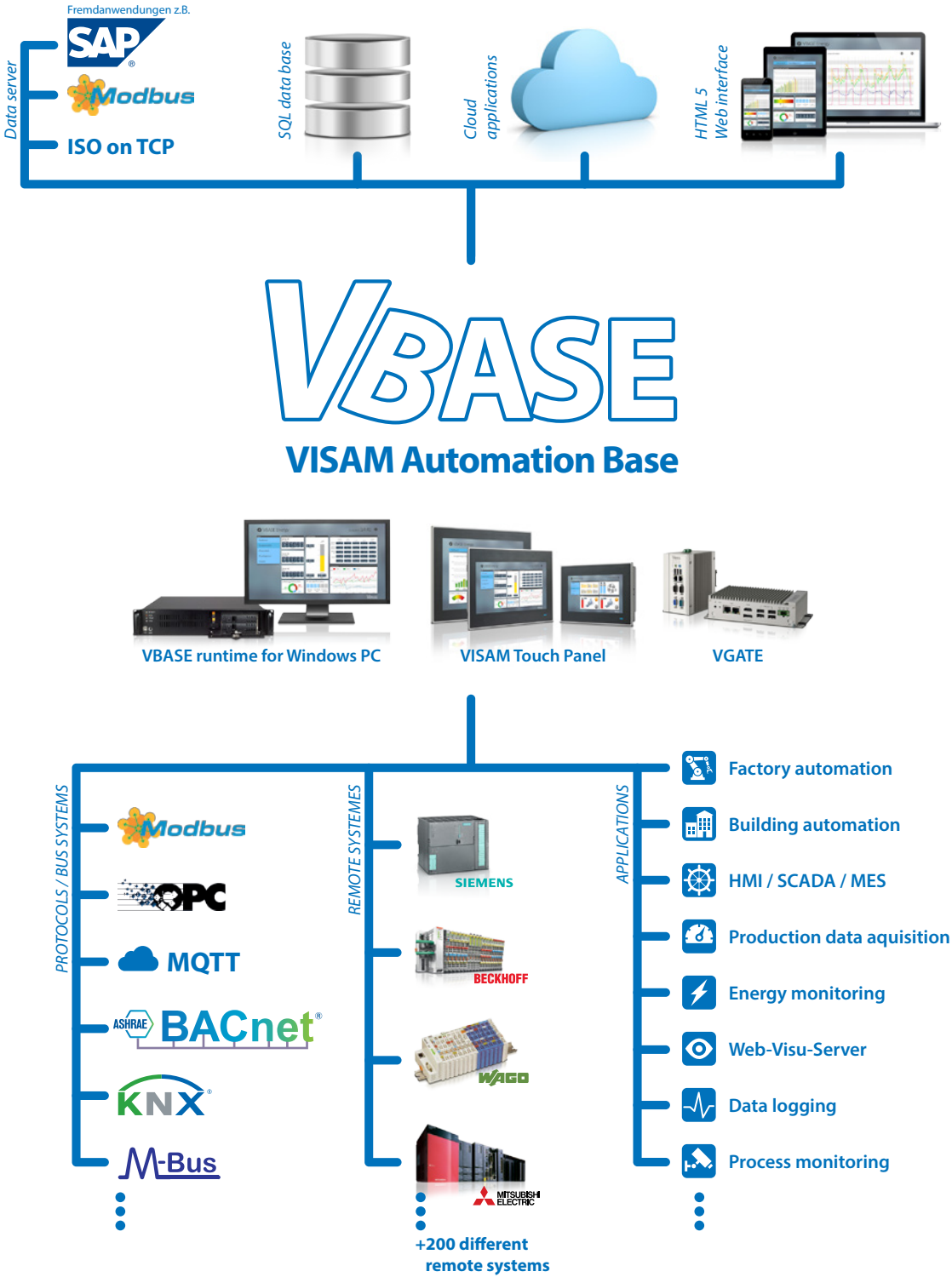
LoRaWAN is a low energy / wide area network for wireless systems. LoRa technology enables data transmission over very long distances with minimal energy requirements. The almost self-sufficient sensors can be freely placed and thus reduce the costs of cabling in particular.

MQTT

MQTT is the most important M2M and IOT protocol for communication via the cloud. The lightweight protocol offers true push communication, is scalable to several thousand clients and works even with poor internet connections. MQTT uses a publish/subscribe architecture with a central broker as message distributor.

+200 VBASE supports more than 200 different protocols, bus and remote systems including e.g.
SNMP, OPC, ISO on TCP, digitalstrom, SPS und IO Systeme von Siemens, Wago, Beckhoff, Mitsubishi... ... ...

The flexible platform for automation.



More information: **www.vbase.net**

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