NETx AUTOMATION

KNX

BACnet

MQTT

Modbus

OPC
(DA/UA)

SNMP

Fidelio/Opera | Protel | Infor
RMS Cloud | CharPMS
VingCard Web | Kaba | Salto

DALI EnOcean
M-Bus DMX

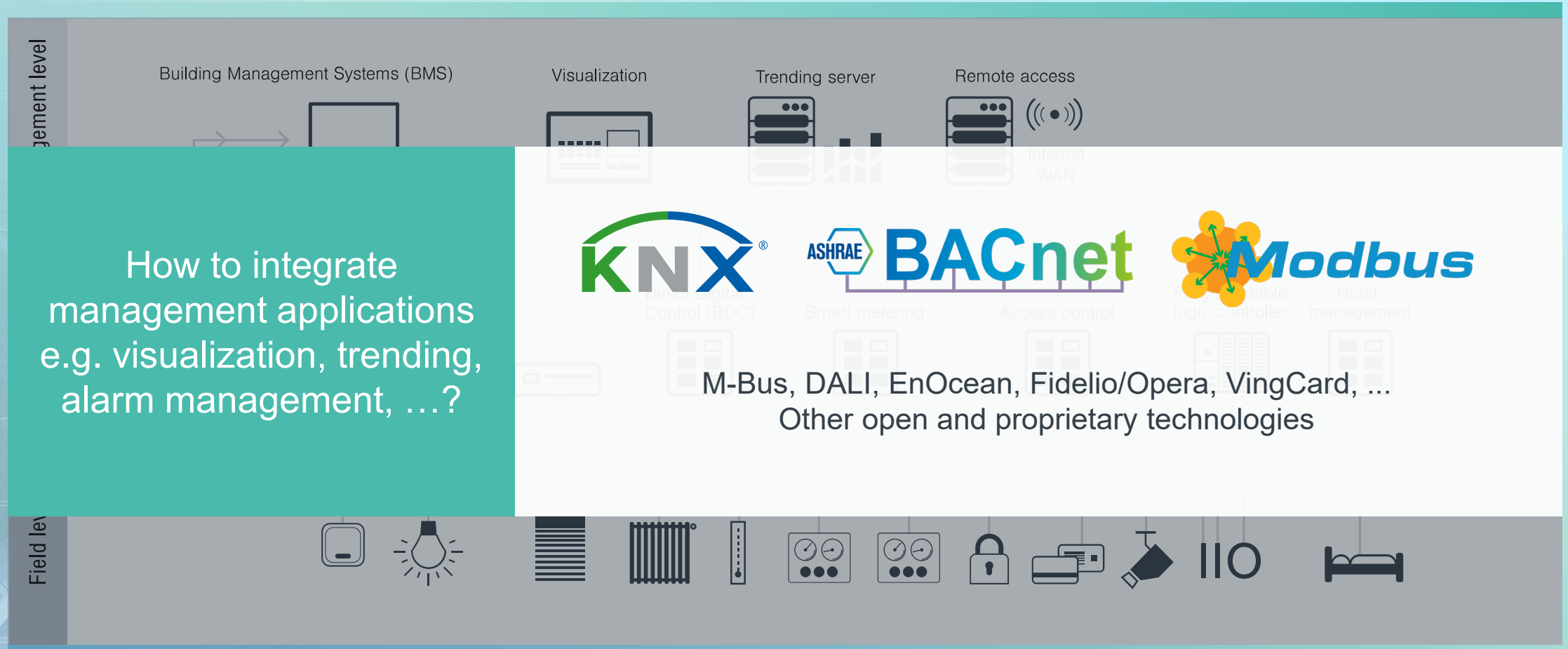
Proprietary solutions

All-in-one

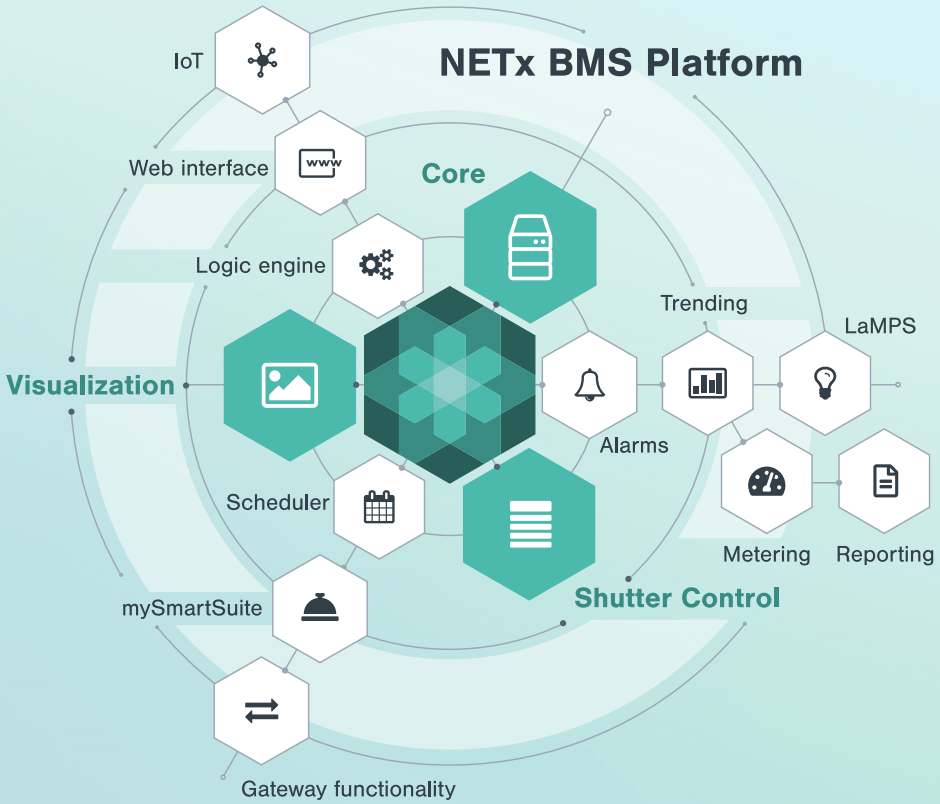
Building management software for medium-sized and enterprise building automation projects

NETx BMS Platform

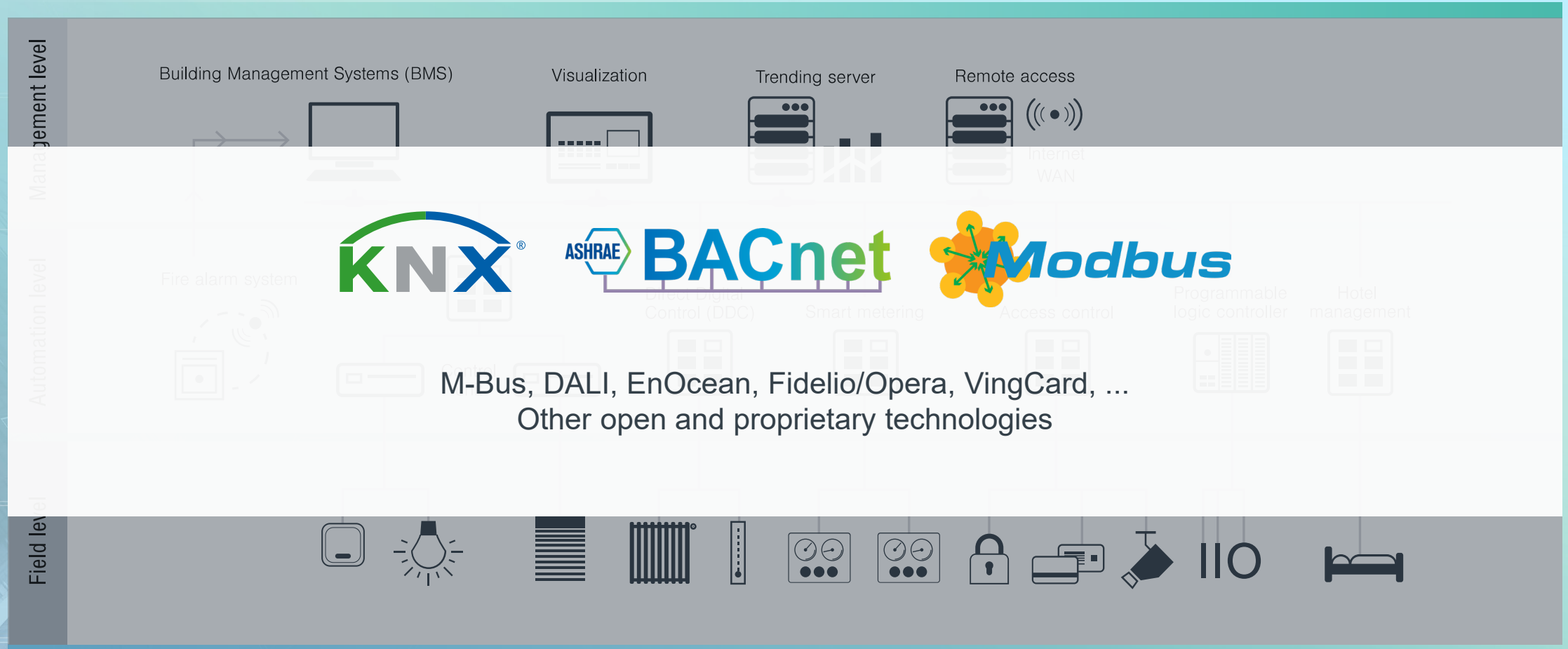
Building automation



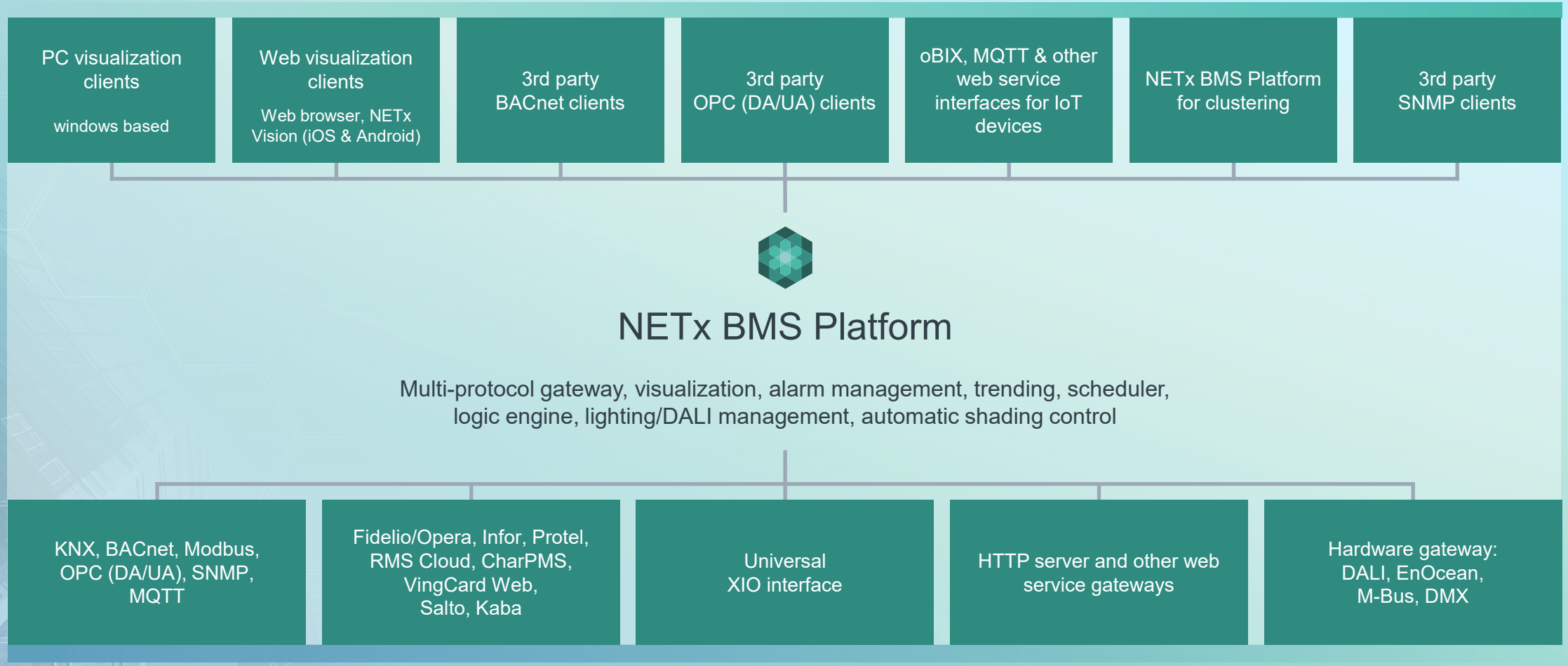
NETx BMS Platform



Building automation



NETx BMS Platform



Components

Core	Visualization	LaMPS	Shutter Control	mySmartSuite	Add-ons
• Gateway functionality • Alarm management • Trending • Reporting • Scheduler • Logic engine • Metering • GRMS	• Visualization for small, medium and large projects • PC and web-based clients • Any number of clients possible	• Lighting management • DALI management	• Automatic shading system • Complex buildings • Inclusion of weather data • 3D design and simulation • Add-on for BMS Server	• Overview of all rooms • Guest information • Check in and check out information • Room status • Message processing	Functions
Web interface • Alarm management • Trending • Scheduler • Explorer • Actions & Conditions	**Web interface** • Visualization	**Web interface** • LaMPS app	**Web interface** • Shutter Control app	**Web interface** • mySmartSuite app	Web Manager apps
• KNX • BACnet • Modbus • OPC (DA/UA) • SNMP • Fidelio/Opera • Infor • Protel • RMS Cloud • CharPMS • VingCard • Salto • Kaba	• Universal XIO interface • HTTP Server and other web service gateways	• 3rd party BACnet, oBIX, MQTT and OPC (DA/UA) clients • 3rd party web service clients	**Hardware gateways:** • Dali • EnOcean • M-Bus • DMX		Interfaces

BMS functions

NETx AUTOMATION

Multi-protocol gateway

Bidirectional data and information change between different protocols and technologies

Alarm management

Monitor the building automation system and report unexpected behavior

Trending

Store past data point values for analysis

Reporting

Management of reports from trend data and historical data point values as well as data from other BMS functions

Scheduler

Definition of time-based events to change data point values or trigger actions

Logic-Engine

Add control functionality using graphical function block programming or scripts

Visualization

Sophisticated visualization engine for web and PC based visualization clients

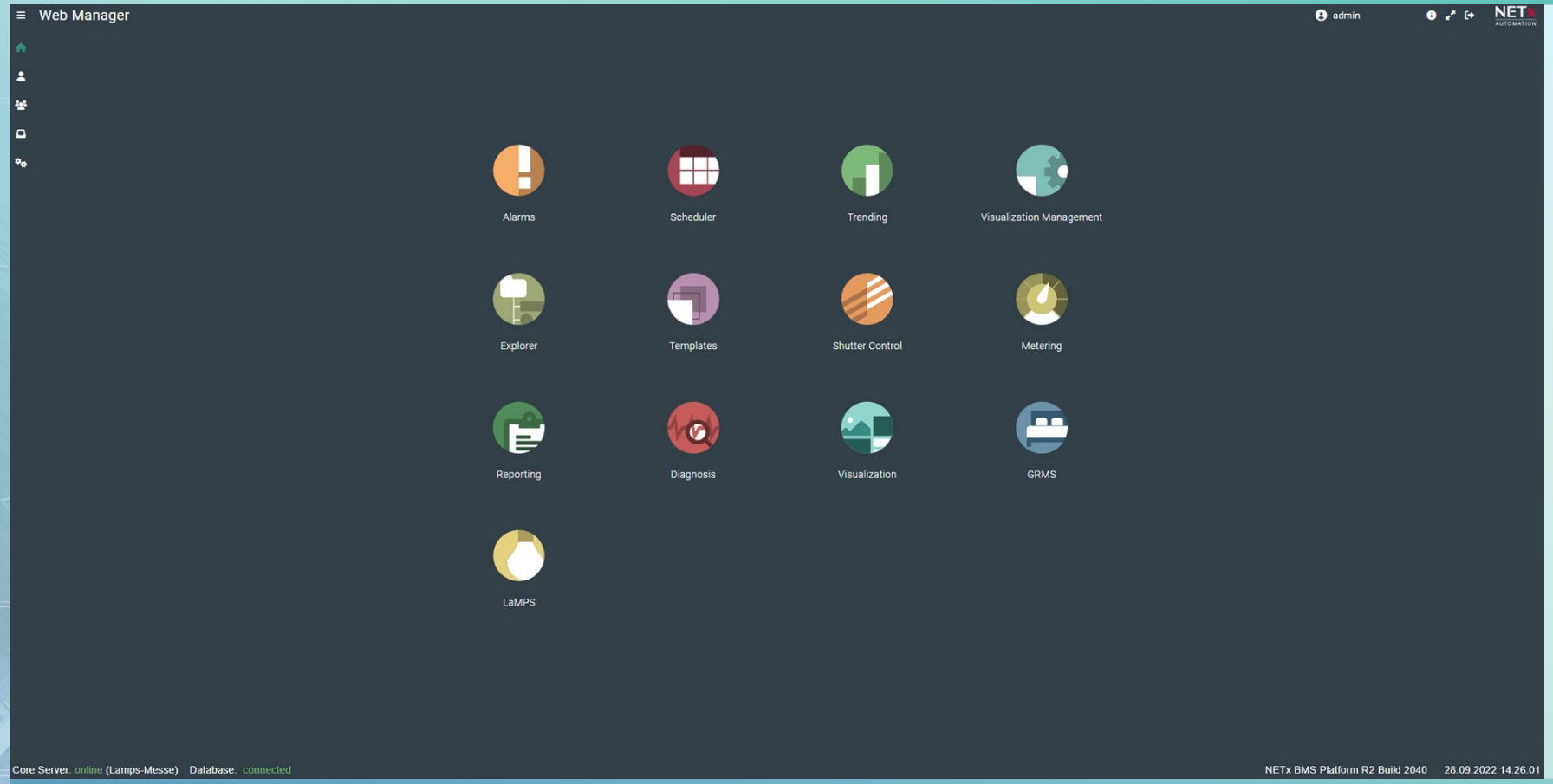
Metering

Monitor, analyze and process data from smart meters

Visualization – functions

Control elements	Vector graphic	Auto scaling	Multiple views
Label, buttons, analog elements (sliders, gauges, ...), link area, multi-state elements, ...	Support of SVG and AutoCAD drawings (DWG, DXF, ...)	PC and web based visualization is automatically scaled to the current screen resolution	Support of multiple views for using multiple screens, browser tabs or floating window elements
Variables	BMS functions	User administration	Usability
Fast creation of large visualizations using project, page, layer, block and group variables. Reuse of pages and groups	Show graphical interface of BMS functions like alarm lists, calendars, trending charts and tables	Use of central user management of BMS Platform and defining different access rights	Easy to use editor for creating visualization projects

Web Manager



Web based interface to manage BMS functions

Access by any client with web browser via secure connection (TLS secured https)

User management

Sophisticated user management and access permissions

Web Manager Apps

Use of central user management of BMS Platform and defining different access rights

NETx AUTOMATION

NETx LaMPS

LaMPS Module for NETx BMS Platform

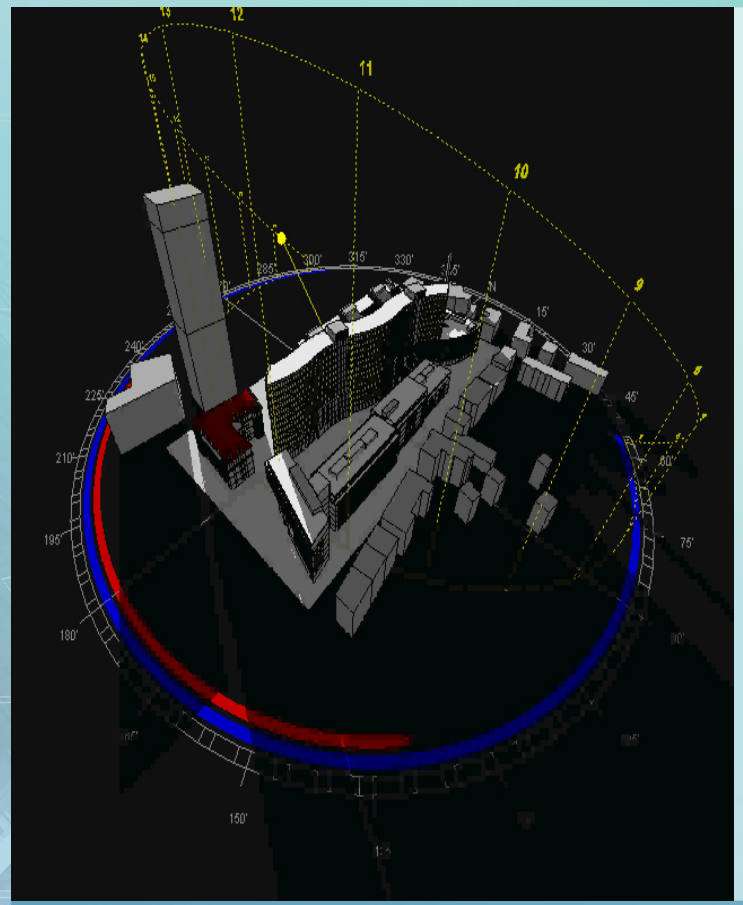
NETx AUTOMATION

Extension module for NETx BMS Platform	Provides manufacturer-independent view of KNX/DALI gateways		Uniform data point view
Triggering DALI tests	Show common DALI errors and error for each device separately	Support for DALI emergency tests	Stores test results in SQL database
Reporting tool for generating customized reports	Automatic export from ETS using NETx BMS App Secure	Support for multiple KNX/DALI gateways: ABB, Gira, Hager, IPAS, Jung, MDT, Schneider, Siemens, Zennio, EAE, ...	

NETx AUTOMATION

NETx Shutter Control

NETx Shutter Control - enhanced automatic shading control



3D model of building + neighbor building and surrounding environment

Simulation to calculate optimal position of blinds and their slats

Current weather data + additional inputs are used together with simulated data to control blinds in real time

Decreases energy demand for HVAC system

Increases user comfort

Required for Class B and Class A

Licensing

License

Number of data points

Integrated data points from field level like KNX group addresses, BACnet objects, Modbus registers, SNMP data points, ...

Number of visualization clients

Web and/or PC based clients

Optional: additional license fees for special modules and interfaces

- **Hotel management interfaces Fidelio/Opera or Protel**
  Fix fee + 5 data points for each room
- **Door lock interfaces VingCard, Salto, Kaba**
  Fix fee + 5 data points for each door lock
- **NETx LaMPS**
  Fix fee + 1 data point for each DALI ballast
- **NETx Shutter Control**
  Project specific fee
- **NETx Metering Module**
  Fix fee + 10 data points for each measurement value
- **NETx mySmartSuite**
  sufficent number of NETx visualization clients required
- **and more**

Licensing process

Hardlock

USB Dongle hardware independent

Softlock

Unlock code dependent on hardware and operating system

System requirements

Operating system - Windows based operating system required

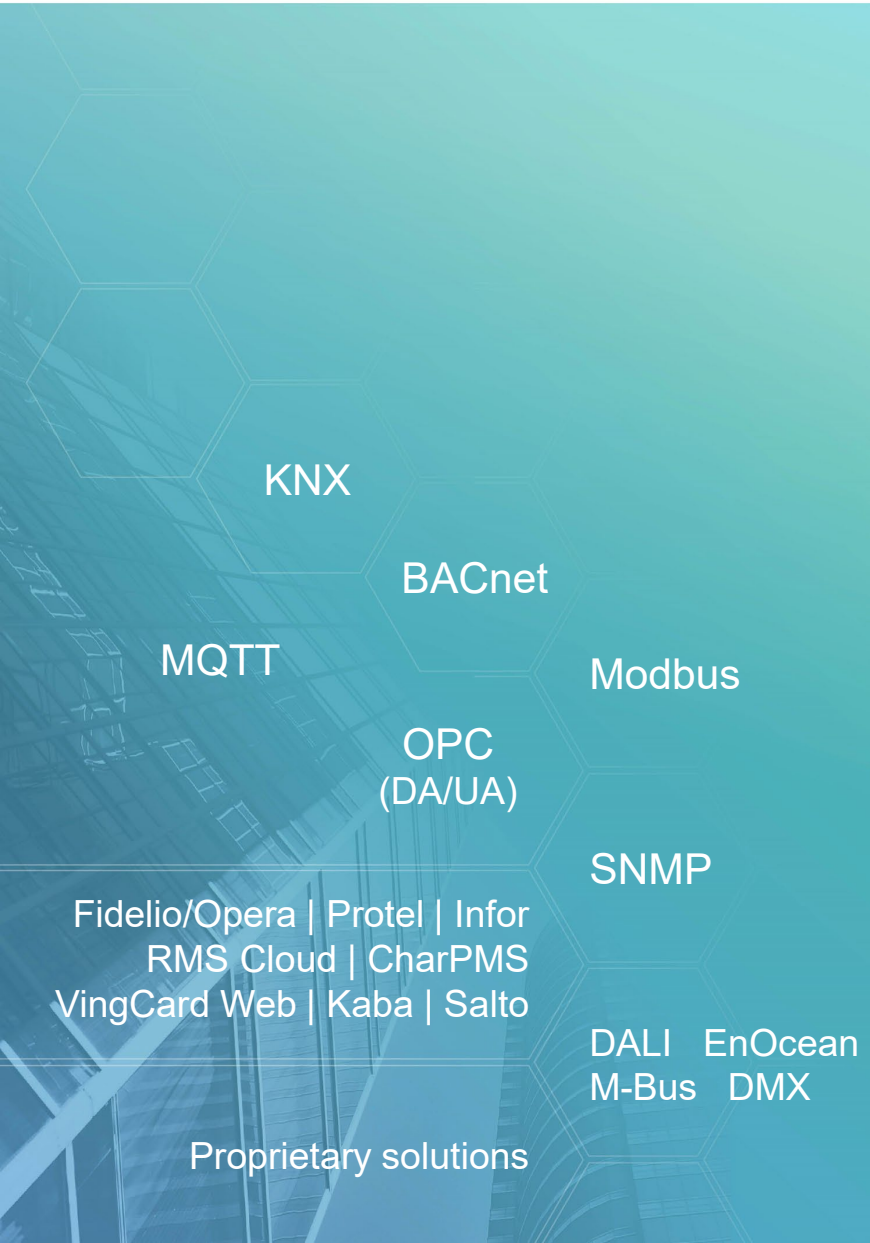
Windows 10 / Windows 11	Windows Server 2016 / Windows Server 2019 / Windows Server 2022

For maintainable systems we strongly recommend at least Windows 10 or Windows Server 2016 (or higher), except NETx KNX OPC Server 3.5.
Our products basically also run on older Windows versions down to Windows 7 and Windows Server 2008. However, due to limited future support for these operating systems by Microsoft we will not be able to provide full support for our software running on these systems.

Hardware

Any device that supports Microsoft Windows can be used	Use of virtualization environments possible
Requirements depend on project size (small embedded device up to server systems)	VMWare, Virtualbox, Hyper-V, ...

NETx AUTOMATION

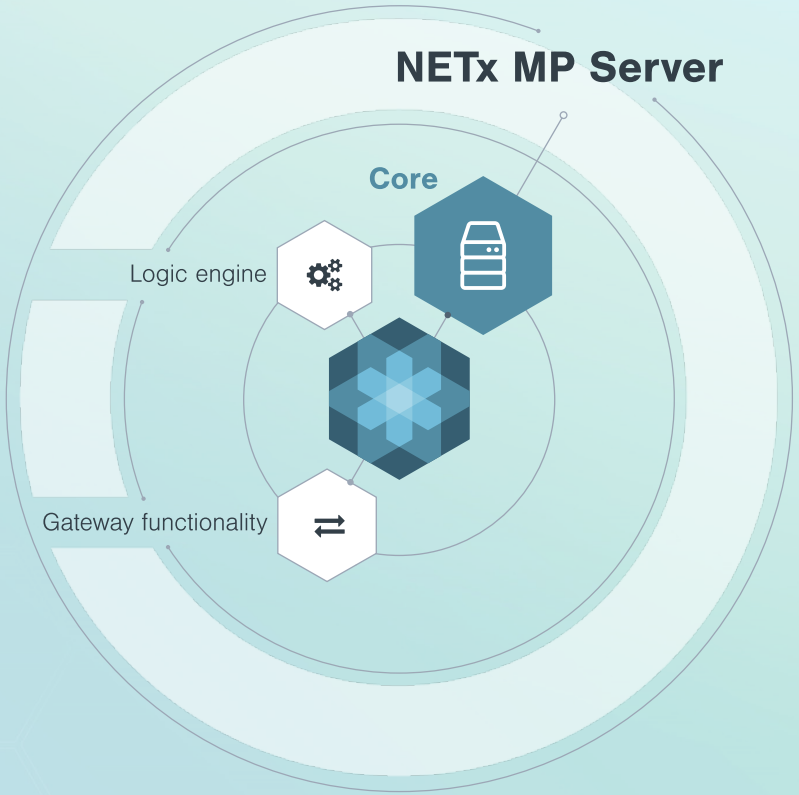


All-in-one

Building management software for medium-sized and enterprise building automation projects

NETx Multi Protocol Server

NETx Multi Protocol Server

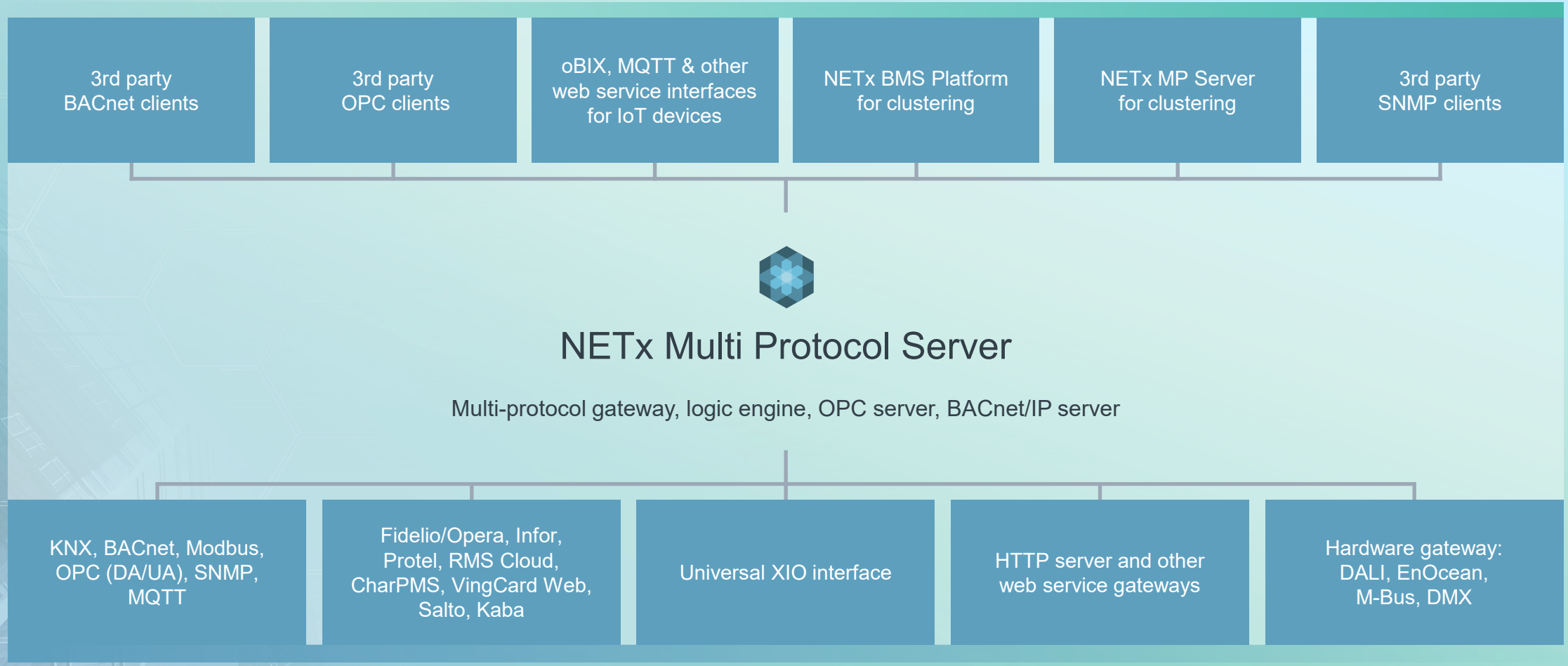


Successor product of

NETx KNX OPC Server 3.5

Upgrade from NETx MP Server to NETx BMS Platform possible

NETx Multi Protocol Server



Interfaces to the field level

Open and standard protocols	Hotel management system	Door lock systems
KNX, BACnet, Modbus, SNMP, OPC, MQTT	Fidelio/Opera, Infor, Protel, RMS Cloud, CharPMS, VingCard Web, Salto, Kaba	VingCard, Kaba, Salto
HTTP Server and other Web Service Gateways	Develop your own interface	Customer specific interface on request

Interfaces to the management level

NETx AUTOMATION

OPC	**BACnet**
OPC DA 2.0 and OPC UA	BACnet/IP server
MQTT	**oBIX and other Web Service interfaces for IoT**
Communication to one or more MQTT brokers	oBIX 1.1 and KNX Web Services

NETx BMS Platform < > NETx MP Server

Product features	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
Several interfaces to the field level KNX, Modbus, BACnet, SNMP, etc.	✓	✓	Alarm management definition of alarms, displaying alarm lists	✓	✗
Several interfaces to the management level OPC, BACnet/IP, oBIX, KNX WS, MQTT, etc.	✓	✓	Trending historical database	✓	✗
Multi-protocol gateway connects several interfaces to the field level	✓	✓	Scheduling time-based events	✓	✗
Import of the device configuration for KNX ETS projects, BACnet discovery, OPC/BMS explorer	✓	✓	Reporting create PDF, Excel,... reports	✓	✗
Monitoring field level and management level analysis	✓	✓	Web-based visualization access with all devices with web browser	✓	✗
Programming logics LUA Script, graphical programming	✓	✓	Web-based management Web Manager including user management	✓	✗
Clustering data exchange between servers	✓	✓	PC-based visualization access with Windows devices	✓	✗

NETx BMS Platform < > NETx MP Server

Product extensions	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
LaMPS Lighting and DALI management	✓	✓	Shutter Control Automatic shading of complex buildings	✓	✗
Metering Module Monitor, analyze and process data from smart meters	✓	✓	mySmartSuite Integrated hotel solution	✓	✗

Interfaces to the management level	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
OPC provides data for other OPC clients	✓	✓	MQTT provides data via MQTT	✓	✓
BACnet/IP provides data for BACnet clients	✓	✓	SQL MariaDB, MS SQL Server for historical data	✓	✗
oBIX provides data for oBIX clients	✓	✓	Web Web Manager and Web Visualization	✓	✗

NETx BMS Platform < > NETx MP Server

Interfaces to the field level	NETx BMS Platform	NETx MP Server
KNX Secure KNXnet/IP tunnelling | KNXnet/IP tunnelling/routing	✓	✓
BACnet BACnet/IP | other BACnet media (BACnet MS/TP,…)	✓	✓
Modbus Modbus/TCP | Modbus RTU over IP	✓	✓
SNMP v1, v2, v3	✓	✓
OPC Integration of other OPC servers	✓	✓
HTTP and web services Integration of data from HTTP servers & web service gateways	✓	✓
Special interfaces on request	✓	✓

	NETx BMS Platform	NETx MP Server
DALI Digital Addressable Lighting Interface	with hardware gateway	
DMX512 stage lighting and effects	with hardware gateway	
EnOcean wireless building automation	with hardware gateway	
M-Bus europ. standard for remote reading of smart meters	with hardware gateway	
Hotel management Fidelio/Opera | Protel | Infor | RMS Cloud | CharPMS Door locking systems: VingCard | Kaba | SALTO	✓	✓
Own interfaces via LUA script, UDP, TCP, RS-232 protocol | via C# .NET API	✓	✓

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and operating system

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Licensing

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