

DISTRIBUTION SOLUTIONS

ABB Ability™ zenon



ABB Ability™ zenon integrates assets by connecting electrical devices, drives, motors, Programmable Logic Controllers and robots to provide complete automation and electrification solutions.

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ABB Ability™ zenon

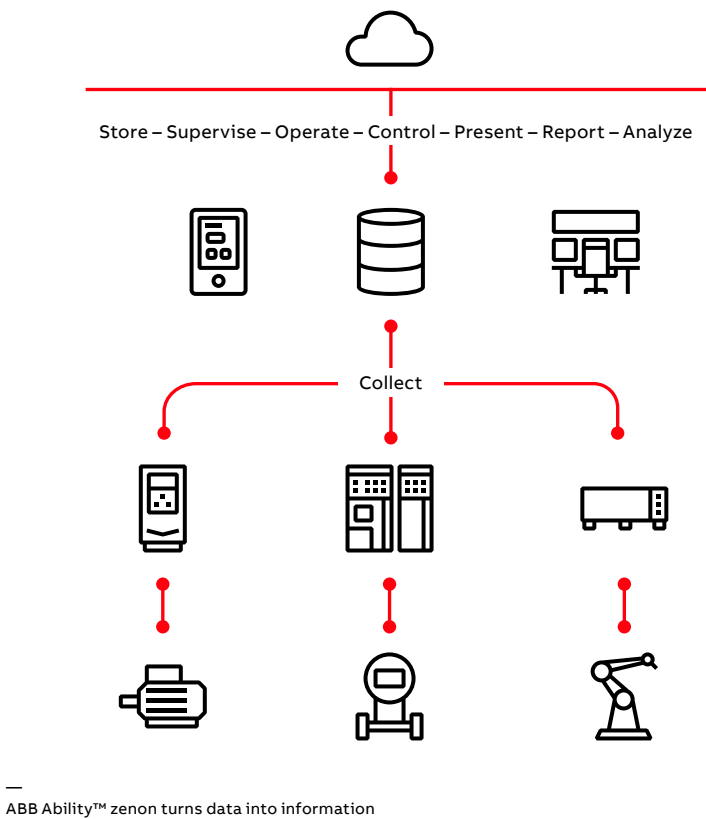


ABB Ability™ zenon integrates your assets byconnecting electrical devices, drives, motors, PLCs and robots to provide complete automation and electrification.

As an open Supervisory Control and Operational Data Management system, ABB Ability™ zenon securely delivers supervision, control, data acquisition, scheduling and performance reporting to industrial and energy automation.

ABB Ability™ zenon is the easy to integrate platform for machine builders, system integrators and engineering, procurement and construction companies.

ABB Ability™ zenon combines a wealth of experience in automation and electrification with new opportunities for digital transformation and helps to put your digital strategies into practice in an easier, faster, and more purposeful way.



Connect – Turning data into information
Operational data is often not centrally stored, leaving the potential for process optimization untapped. With its numerous supported communication protocols, simple to setup ERP and open interfaces, ABB Ability™ zenon becomes a key component in the Industrial Internet of Things. ABB Ability™ zenon connects your assets and activates them for remote data collection, control and analytics.

Collect – Securing information integrity
Using ABB Ability™ zenon, data is systematically collected, processed and transferred to other systems as necessary. Heterogeneous hardware landscapes can be easily connected and expanded. This is made possible by numerous drivers and open interfaces. ABB Ability™ zenon protects operations data integrity by a security system designed for being deployed into a critical infrastructure. Users can safely identify and access the status of their equipment.

Collaborate – Creating insight for better business decisions
ABB Ability™ zenon reduces complexity for operators, makes it possible to make well-founded decisions and act faster based on transparent information. The software platform visualizes wide ranging processes in real time to give operators control over equipment, whether individual machines, entire production locations, or spanning the whole company.

ABB Ability™ zenon comes with audit trail, batch and production scheduling capabilities, maintenance and energy management functions. Easy-to-use reporting opens deep insight into production processes and allows for quality assurance, production optimization and on-line reporting.

Engineering productivity
ABB Ability™ zenon’s multi-user engineering capabilities and object-oriented design ensures low startup cost and high engineering productivity. Through the open engineering in terface architecture, ABB Ability™ zenon perfectly integrates with the existing engineering tool chain. No programming skills are required to create projects, even multi-location projects or those that require redundancy. Projects are configured by setting parameters, supported by configuration wizards. This applies to the initial engineering, as well as the maintenance and extension ofexisting applications, regardless of the software version originally used.

Low total cost of ownership
The extensive life cycle of ABB Ability™ zenon, together with its backward compatibility and the possibility to engineer mixed version environments ensures simple and cost-effective extensions of production assets.

Your complete automation and electrification solution starts with ABB
With ABB Ability™ zenon, ABB completes its automation and electrification products portfolio and delivers drives, automation, electrification, support and service for machine builders and system integrators from a single vendor.

System Design



ABB Ability™ zenon has a simple process of defining the architecture, function, interfaces, and data for a system to satisfy specified requirements. With this, ABB Ability™ zenon supports tying cost-effective solutions according to any need.

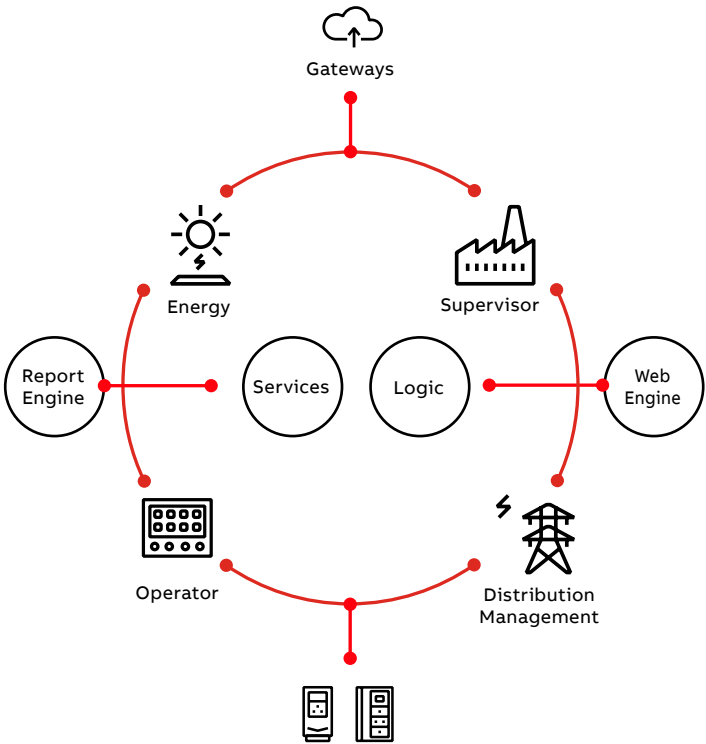


ABB Ability™ zenon Editions and functional extensions

Editions

ABB Ability™ zenon is grouped in four Editions, providing specialized features for Machine Automation, Line and Factory Automation, Distribution Automation and Distribution Management. Each Edition can be extended by Drivers to communicate with field devices, Gateways for the integration with superordinated systems, a Smart Server for ubiquitous Supervision, Control and Dashboards, Modules for functional extensions, Logic, an IEC61131-3 soft PLC, as well as the Report Engine, providing Data Analytics and Prediction.

Developer Network

Engineering teams at System Integrators are invited to join our ABB Ability™ zenon Developer Network. The ABB Ability™ zenon Developer Network membership gives its members direct access to our global technical, marketing and sales support and trainings. Included in the membership is a selectable number of ABB Ability™ zenon Engineering licenses.

ABB Ability™ zenon Editions

Operator	Supervisor	Energy	Distribution Management
<ul style="list-style-type: none">• Operator is a cost-effective product adapted to machine operation. With its clear and intuitive operation, Operator is orientated to the requirements of modern ergonomics and usability.• Optimum usability including Multi-Touch gestures• Security at machine level• Individually adaptable (visualization, languages, units, color palettes, and much more)• Works in almost any environment thanks to more than 300 integrated communication protocols• Remote maintenance and hot reload• Full integration with other ABB Ability™ zenon installations	<ul style="list-style-type: none">• Supervisor is a comprehensive software for line, factory and infrastructure automation. It permits the simple creation of automation networks with the option to use a web connection• Includes key features of Operator• Full data security, maximum availability without downtime and no loss of data• Supports large-scale, networked and redundant systems• Effective reporting• Fits into existing operations and management environments thanks to excellent connectivity• Develop individual projects, use ready-made templates and intelligent wizards• Reuse objects you have created in other projects and keep track of things with Multi-project Administration even when working in a team	<ul style="list-style-type: none">• Energy is a package with special functionality for the energy and utility sector. The user benefits from easy-to-implement functions that allow for an individual adjustment of the application to the physical environment• Includes key features of Supervisor• Built-in Energy and Utility reporting and Historian Data Analytics• Safe command processing with the Command Sequencer• Replay of system behaviour using the process recorder• Built-in drivers for IEC61850, DNP3, IEC60870-5-104 and Mod-bus communication• Gateway configuration for IEC 60870 or DNP3• SCL Editor for IEC 61850 documents• Effective visualization and control projects	<ul style="list-style-type: none">• Distribution Management is a package with special functionality for the Energy Distribution and Transportation sectors. The user benefits from easy-to-implement functions that allow for an individual adjustment of the application to the physical environment• Includes key features of Energy• Load Flow Calculation for Distribution and Transportation Grids• Prediction of voltage, current, phase angle, active and reactive power• Voltage to ground-interlocking• Disconnecter under load-interlocking• Ground fault location (impedancebased)• Integrated GIS• Topology including Automatic Line Coloring, Generator and Disconnecter

System and license layout

As a preparation to your order for ABB Ability™ zenon, you need to have a clear understanding of the system you will use to execute your operational functions and how you want to engineer and maintain the system you desire to build.

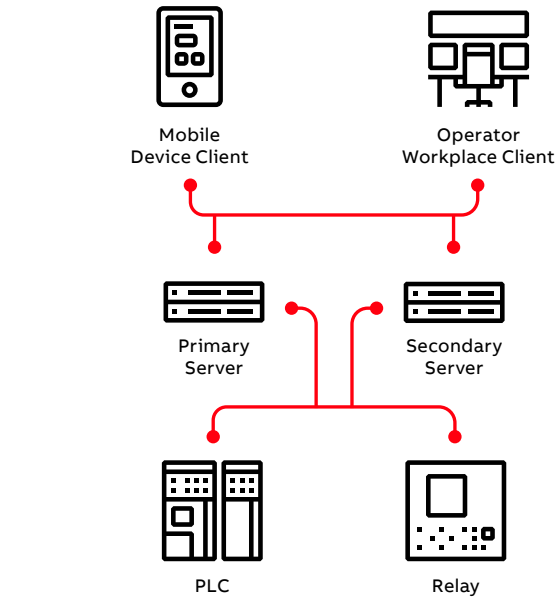


Order Preparation

After having designed your system, allocate the desired function to the system nodes, select the required licenses and proceed with ordering from the local or global ABB contact at:
<https://new.abb.com/channel-partners/search#>.
ABB sales support is available at:
zenon.sales@abb.com.

System Design

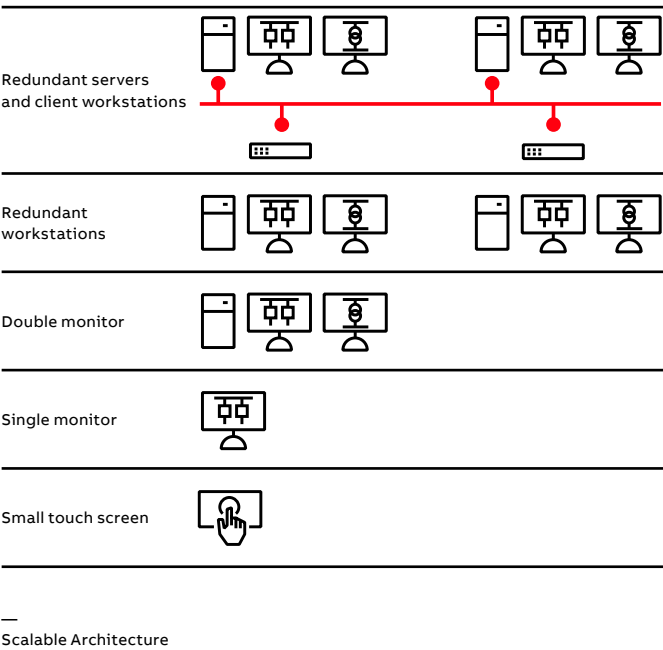
In system design, create an overview of the functions and the external interfaces the system shall maintain. A system may have external connections to material, energy and data flows. ABB Ability™ zenon is a subsystem for Operations Data Management of Automation and Electrification systems. For the selection of the right ABB Ability™ zenon licenses, it is enough to focus on data flows. System Design may end up in system design drawings, showing nodes, protocols and security infrastructure (network zones, firewalls, NAT routers) and a Bill of Material to host the system function.



Example System Drawing

Scalable architecture

With its flexible and modular approach ABB Ability™ zenon allows the use of flexible architectures. From standard multi-touch machine HMI panels up to redundant multi-server multi-client workstations with multiple screens connected can be setup.



System Boundaries and Peer Points

ABB Ability™ zenon is a software that resides on servers that are interfacing Relays, Robots, PLC, Measurements or other computers through serial and/or Ethernet interfaces. A server has a client included as local operator workplace. Additional clients run on a separate computer and are licensed separately. Clients communicate with ABB Ability™ zenon servers only. Additionally, state of the art technology like HTML5 based visualization, supervision and control can be set up. Determine the numbers and types of nodes that run an ABB Ability™ zenon Server or Client.

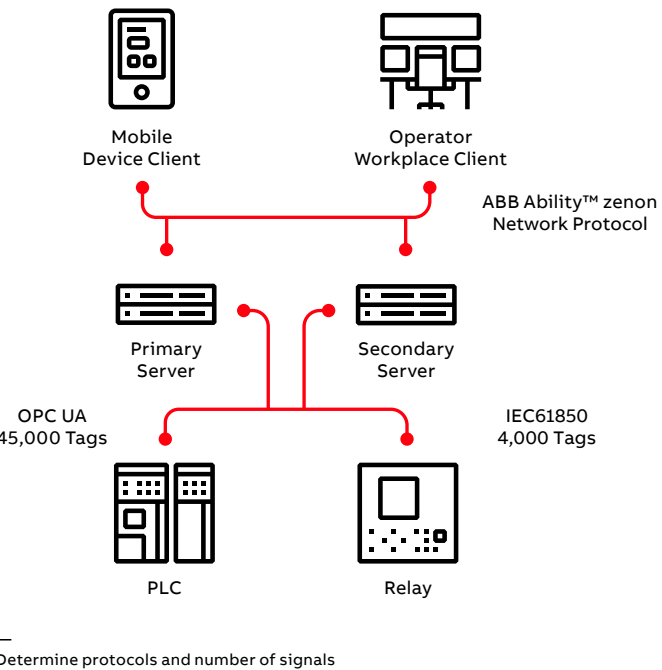
Signals and Protocols

ABB Ability™ zenon connects to devices through its more than 300 drivers and gateways. Data is exchanged through signals. Binary, Analog Values, Alarms and Events are considered being separate signals, if they are transferred across

the ABB Ability™ zenon system boundaries. On each node, determine the numbers and types of external connections. Determine the protocols and number of signals communicated through the protocols.

Additional Functions

The ABB Ability™ zenon editions deliver core functions to their applications which can be extended by additional functions called Options. The list of included and optional functions of each edition can be found on the next pages.



System and license layout

Editions and Options

Feature	licensed on ⁽³⁾ ABB ID		ZSE-OP	ZSE-SU	ZES-DV	ZEE-SRV	ZEE-CLT	ZEE-DV	ZDMS SRV	ZDMS CL	ZDMS DV	ZSU PACK
Basic												
Hardware binding												
Fixed project delivery												
No. of licenses			1	1	1	1	1	1	2	1	1	1
Operation			•	•	•	•	•	•	•	•	•	•
Development					•			•			•	•
Networking												
Can act as Server			•	•	•	•		•	•		•	•
Can act as Client			•	•	•		•			•	•	•
Distributed engineering				•	•	•	•	•	•	•	•	•
Redundancy				•	•	•	•	•	•	•	•	•
Redundancy (circular)				•	•	•	•	•	•	•	•	•
Multiprojecthierarchy				•	•	•	•	•	•	•	•	•
Features and Modules												
3D Integration	DEV	ZS12-3D			◦			•			•	•
Alarm areas			•	•	•	•	•	•	•	•	•	•
Alarm handling			•	•	•	•	•	•	•	•	•	•
Automatic Line Coloring	DEV, SRV, CL	ZS12-ALC	•	•	•	•	•	•	•	•	•	•
Historian with SQL Export	DEV, SRV	ZS12-ARCHEXP	◦	◦	◦	•		•	•	•	•	•
Batch Control Starter Edition	DEV, SRV	ZS12-BASE		◦	◦	◦		◦	◦	◦	◦	•
Batch Control Professional Edition	DEV,SRV	ZS12-BAPRO		◦	◦	◦		◦	◦	◦	◦	◦
Command processing						•	•	•	•	•	•	
Command sequencer	DEV, SRV	ZS12-CS				◦		•	•		•	
Development Option on Server	SRV	ZEE12-ED				◦	◦		◦	◦		
Development Option standalone	SRV	ZEE12-ED-SA				◦	◦		◦	◦		
eSignature	DEV, SRV, CL	ZS12-ESIG		◦	◦	◦	◦	◦	◦	◦	◦	◦
Event handling			•	•	•	•	•	•	•	•	•	•
Everywhere Server	SRV	ZS12-EVWH	◦	◦	◦	◦		•	◦		•	◦
Extended Trend Monitoring	DEV, SRV, CL	ZS12-ETM	◦	◦	◦	•	•	•	•	•	•	•
Extended Trend and Historian Starter Edition	DEV, SRV, CL	ZS12-ARVETM-SE	◦	•	•	•	•	•	•	•	•	•
GIS Editor and Control	DEV, SRV	ZS12-GIS		◦	◦	◦		•	•		•	•
Historian SQL Server Interface	DEV, SRV	ZS12-ZSQLSRV		◦	◦	◦		•	•		•	•
HTML window /embedded browser			•	•	•	•	•	•	•	•	•	•
Interlocking			•	•	•	•	•	•	•	•	•	•
Language switch			•	•	•	•	•	•	•	•	•	•
Load Flow Calculation	DEV, SRV, CL	ZS12-LFC-DMS							•		•	
Load Management	DEV, SRV	ZS12-EMS		◦	◦	◦		•	•		•	•
Industrial Maintenance Manager	DEV, SRV, CL	ZS12-IMM		◦	◦	◦	◦	•	◦	◦	•	•
Message Control	DEV, SRV	ZS12-MC	◦	◦	◦	◦		•	◦		•	•
Multi touch support			•	•	•	•	•	•	•	•	•	•
Online reload			•	•	•	•	•	•	•	•	•	•
PLC diagnosis for S7 Simatic Graph	DEV, SRV, CL	ZS12-PLC-DIAG	◦	◦	◦	◦	◦	•			•	•
Process Recorder	DEV, SRV	ZS12-PR		◦	◦	◦		•	•		•	•
Production Facility Scheduler	DEV, SRV, CL	ZS12-PFS		◦	◦	◦	◦	◦	◦	◦	•	◦
Programming Interface (VBA/VSTA)				•	•	•	•	•	•	•	•	•
Programming Interface (C# /VB.NET)			•	•	•	•	•	•	•	•	•	•
Recipes (std)			•	•	•	•	•	•	•	•	•	•
Recipe group manager	DEV, SRV, CL	ZS12-RGM	◦	◦	◦	•	•	•	•	•	•	•
Report Generator	DEV, SRV, CL	ZS12-REPORT	◦	◦	◦	◦	◦	•	•	◦	•	•
Report Viewer			•	•	◦	•	•	•	•	•	•	◦
SAP Interface	DEV, SRV	ZS12-SAP		◦	◦	◦		◦	◦		•	◦
Scheduler			•	•	•	•	•	•	•	•	•	•
Shift Management			•	•	•	•	•	•	•	•	•	•

- Included
◦ optional
(1) 1 included
(2) max. 1
(3) SRV – Server
CLT – Client
DEV – Developer
N – Number of Tags licensed
X – Number of Clients licensed
- ZSE-OP – Operator Runtime
ZSE-SU – Supervisor Runtime
ZES-DV – Engineering Workplace for Operator and Supervisor
ZEE-SRV – Energy Server
ZEE-CLT – Energy Client
ZEE-DV – Engineering Workplace for Energy
ZDMS-SRV – Distribution Management Server
ZDMS-CLT – Distribution Management Client
ZDMS-DV – Engineering Workpace for Distribution Management
ZSU-PACK – Supervisor with most options included

Editions and Options

Feature	licensed on ⁽¹⁾ ABB ID		ZSE-OP	ZSE-SU	ZES-DV	ZEE-SRV	ZEE-CLT	ZEE-DV	ZDMS SRV	ZDMS CL	ZDMS DV	ZSU PACK
State Estimator	DEV, SRV	ZS12-SE-DMS								•		•
Topology	DEV, SRV	ZS12-TOP-DMS								•		•
User Experience Wizard	DEV				•							•
Video integration			•	•	•	•	•	•	•	•	•	•
Versions – old ones included												
Worldview (mouse or touch)			•	•	•	•	•	•	•	•	•	•
WPF support			•	•	•	•	•	•	•	•	•	•
Standard drivers												
3964R-RK512 driver	DEV, SRV	ZS12-DRV-3964R32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
3S v3 driver for PLC Handler	DEV, SRV	ZS12-DRV-3S_V3	◦(1 incl.)	◦	◦	◦		•	◦		•	•
ABB 07KT94 driver	DEV, SRV	ZS12-DRV-CS3132	◦(1 incl.)	◦	◦	◦		•	◦		•	•
ABB AC500 driver	DEV, SRV	ZS12-DRV-AC500	◦(1 incl.)	◦	◦	◦		•	◦		•	•
ABB Drives PHLOEM driver	DEV, SRV	ZS12-DRV-PHLOEM	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Allen-Bradley DF1-driver	DEV, SRV	ZS12-DRV-ALLENDF1	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Allen-Bradley ODVA driver	DEV, SRV	ZS12-DRV-LOGIX_ODVA	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Allen-Bradley RS – Linx driver	DEV, SRV	ZS12-DRV-ALLENBNT	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Archive driver (RAW)	DEV, SRV	ZS12-DRV-ARCHDRV	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Asfinag – SaRS SOS-telephones	DEV, SRV	ZS12-DRV-SARS	◦(1 incl.)	◦	◦	◦		•	◦		•	•
B&R – BR TCP-IP driver	DEV, SRV	ZS12-DRV-BURTCP	◦(1 incl.)	◦	◦	◦		•	◦		•	•
B&R – BR-PVI based driver	DEV, SRV	ZS12-DRV-BURPVI	◦(1 incl.)	◦	◦	◦		•	◦		•	•
B&R – BR-PVI driver (replaced)	DEV, SRV	ZS12-DRV-BUR20032	◦(1 incl.)	◦	◦	◦		•	◦		•	•
B&R – Transponder Reader 4102/4150DEV, SRV		ZS12-DRV-BuR41xx32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Bachmann M1 driver	DEV, SRV	ZS12-DRV-BACH	◦(1 incl.)	◦	◦	◦		•	◦		•	•
BACnet driver NG	DEV, SRV	ZS12-DRV-BACNETNG	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Beckhoff BC-BK 9000	DEV, SRV	ZS12-DRV-BECKH9000	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Biffi-Tyco Flow Control – DCM	DEV, SRV	ZS12-DRV-BIFFIDCM	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Brodersen – System 2000 driver	DEV, SRV	ZS12-DRV-SYS2000	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Brodersen – System 2000 logging	DEV, SRV	ZS12-DRV-SYSLOG	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Buderus – Buderus32 driver	DEV, SRV	ZS12-DRV-BUDERUS	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Codesys ArtING SoftPLC driver	DEV, SRV	ZS12-DRV-3S_ARTI_NG	◦(1 incl.)	◦	◦	◦		•	◦		•	•
CP001 Gateway driver	DEV, SRV	ZS12-DRV-CP001	◦(1 incl.)	◦	◦	◦		•	◦		•	•
CTI driver	DEV, SRV	ZS12-DRV-CTI	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Driver for Esser BMZ 8000	DEV, SRV	ZS12-DRV-ESSER32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
EIB/KNX driver	DEV, SRV	ZS12-DRV-EIBV2_32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
ESA – Driver for ESA PCI CIB	DEV, SRV	ZS12-DRV-ESA32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Euchner – Ident System driver	DEV, SRV	ZS12-DRV-EUCH	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Festo – EasyIP Multiprog driver	DEV, SRV	ZS12-DRV-FEASYIP	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Festo – Serial-CI driver, FST	DEV, SRV	ZS12-DRV-FEFRFC	◦(1 incl.)	◦	◦	◦		•	◦		•	•
File driver	DEV, SRV	ZS12-DRV-DATEI32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
GE SRTTP driver	DEV, SRV	ZS12-DRV-GE_SRTTP	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Generic driver for CAN bus	DEV, SRV	ZS12-DRV-CAN	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Hilscher CIF driver	DEV, SRV	ZS12-DRV-CIF32	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Hilscher MPI driver	DEV, SRV	ZS12-DRV-OPENMPI	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Hitachi – Hitachi driver	DEV, SRV	ZS12-DRV-HITA	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Hydrometer – Hydrometer Driver	DEV, SRV	ZS12-DRV-Hydrometer	◦(1 incl.)	◦	◦	◦		•	◦		•	•
IBH – Driver for IBH Soft PLC	DEV, SRV	ZS12-DRV-IBHRTSPS	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Idec – Idec driver	DEV, SRV	ZS12-DRV-IDEDEC	◦(1 incl.)	◦	◦	◦		•	◦		•	•
i-LON 100 driver	DEV, SRV	ZS12-DRV-LON100	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Integra driver	DEV, SRV	ZS12-DRV-INTEGRA	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Interbus S driver	DEV, SRV	ZS12-DRV-INTERNT	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Jetter – Jetter Treiber	DEV, SRV	ZS12-DRV-JETTER	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Kaba – data point server driver	DEV, SRV	ZS12-DRV-KabaDPSTerver	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Keba – Driver for buttons / Ketop	DEV, SRV	ZS12-DRV-KETOP	◦(1 incl.)	◦	◦	◦		•	◦		•	•
KEPCO – Kepco KDNPN1 driver	DEV, SRV	ZS12-DRV-KDNP1	◦(1 incl.)	◦	◦	◦		•	◦		•	•
Koyo – KOYO Sequence driver	DEV, SRV	ZS12-DRV-KOYO	◦(1 incl.)	◦	◦	◦		•	◦		•	•
LON driver	DEV, SRV	ZS12-DRV-LON32	◦(1 incl.)	◦	◦	◦		•	◦		•	•

- Included
◦ optional
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(2) max. 1
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ZSU-PACK – Supervisor with most options included

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Editions and Options

Feature	licensed on ⁽¹⁾ ABB ID		ZSE-OP	ZSE-SU	ZES-DV	ZEE-SRV	ZEE-CLT	ZEE-DV	ZDMS SRV	ZDMS CL	ZDMS DV	ZSU PACK
LSIS – LS Industrial Systems-XGT	DEV, SRV	ZS12-DRV-LS_XGT	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Mastervolt – MasterBus driver	DEV, SRV	ZS12-DRV-Masterbus	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Matsushita – TCP-IP drv.	DEV, SRV	ZS12-DRV-MATSUTCP	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
M-Bus – Standard M-Bus driver	DEV, SRV	ZS12-DRV-MBUS32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Metrawatt driver	DEV, SRV	ZS12-DRV-Metrawatt	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Microsoft – Azure driver	DEV, SRV	ZS12-DRV-AzureDrv	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Mininet-Master driver	DEV, SRV	ZS12-DRV-MINI32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Mitsubishi – Melsec A-Q driver	DEV, SRV	ZS12-DRV-MITSUB	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Mitsubishi – Melsec FX driver	DEV, SRV	ZS12-DRV-MITFX	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Modbus RTU/Open Modbus TCP drv.	DEV, SRV	ZS12-DRV-MODRTU32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Modicon TSX Micro driver	DEV, SRV	ZS12-DRV-MODICON	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Moeller Electric PSUNI driver	DEV, SRV	ZS12-DRV-PSUNI32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
NMEA 2000 Bus driver	DEV, SRV	ZS12-DRV-NMEA2000	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Omron – OMRON driver	DEV, SRV	ZS12-DRV-OMRON32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Omron – Omron FINS driver	DEV, SRV	ZS12-DRV-OMRONFINS	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
OPC Client V2-0 driver	DEV, SRV	ZS12-DRV-OPCCLI32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
OPC UA Client driver	DEV, SRV	ZS12-DRV-OPCUA	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
OSAI – OSAI TCP/IP driver	DEV, SRV	ZS12-DRV-OSAI	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Otis – Driver for Otis controller	DEV, SRV	ZS12-DRV-OTIS	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Panasonic serial driver	DEV, SRV	ZS12-DRV-MATSU32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Passive Modbus RTU driver	DEV, SRV	ZS12-DRV-MODLISTEN	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
PC Adapter – VipaGreenCable	DEV, SRV	ZS12-DRV-S7PCADAPTER	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
PCS807 Profibus DP driver	DEV, SRV	ZS12-DRV-PCS80732	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
PCS812 S7 connection	DEV, SRV	ZS12-DRV-PCS812	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Phoenix Contact driver	DEV, SRV	ZS12-DRV-PHOENIX32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Pilz – PILZ-PSS driver	DEV, SRV	ZS12-DRV-PSS32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Profibus DP Master driver	DEV, SRV	ZS12-DRV-DPUNI32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Profibus FMS over Siemens PC card	DEV, SRV	ZS12-DRV-FMSNT	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Reis – Reis Robotics driver	DEV, SRV	ZS12-DRV-REIS32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
RTK Instruments – RTK9000 driver	DEV, SRV	ZS12-DRV-RTK9000	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S5 H1 driver	DEV, SRV	ZS12-DRV-S5H1NT	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S5 TCP-IP driver	DEV, SRV	ZS12-DRV-S5TCP32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S7 driver Softnet based	DEV, SRV	ZS12-DRV-S7NT	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S7 HMI adapter driver	DEV, SRV	ZS12-DRV-S7HMI	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S7 HMI adapter driver	DEV, SRV	ZS12-DRV-S7HMI	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S7 MPI for CE terminals	DEV, SRV	ZS12-DRV-MPI	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
S7 TCP-IP driver	DEV, SRV	ZS12-DRV-S7TCP	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Saia – Saia Direct driver	DEV, SRV	ZS12-DRV-SADIR	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Saia – SAIA2ND32 driver	DEV, SRV	ZS12-DRV-SATCP	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Schiele – Schiele S400 driver	DEV, SRV	ZS12-DRV-S432	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Schweitzer – SEL Fast Msg.Protocol	DEV, SRV	ZS12-DRV-SEL	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – S7 driver for S7-200	DEV, SRV	ZS12-DRV-S7PPI200	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – S7 Spont	DEV, SRV	ZS12-DRV-S7SPONT	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – S7-1200/1500 driver	DEV, SRV	ZS12-DRV-S7TIA	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – Siclimat X Decos	DEV, SRV	ZS12-DRV-S7DCOS	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – Siemens S5 PD driver	DEV, SRV	ZS12-DRV-S5PG32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – Simotion driver	DEV, SRV	ZS12-DRV-SIMOTION	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens – WINAC driver	DEV, SRV	ZS12-DRV-S7AC41x32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Siemens Sigmasys driver	DEV, SRV	ZS12-DRV-SIGMASYS	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Sigmatek driver	DEV, SRV	ZS12-DRV-SIGMA32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Sigmatek Lasal Driver	DEV, SRV	ZS12-DRV-STLASAL	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Sinthesi – PICnet driver	DEV, SRV	ZS12-DRV-SINTH	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
SNMP – SNMP Driver	DEV, SRV	ZS12-DRV-SNMP	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•

- Included
◦ optional
⁽¹⁾ 1 included
⁽²⁾ max. 1
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- ZSE-OP – Operator Runtime
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ZES-DV – Engineering Workplace for Operator and Supervisor
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ZDMS-DV – Engineering Workpace for Distribution Management
ZSU-PACK – Supervisor with most options included

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Editions and Options

Feature	licensed on ⁽¹⁾ ABB ID		ZSE-OP	ZSE-SU	ZES-DV	ZEE-SRV	ZEE-CLT	ZEE-DV	ZDMS SRV	ZDMS CL	ZDMS DV	ZSU PACK
SNMP – SNMP driver New Generation	DEV, SRV	ZS12-DRV-SNMPNG32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
SQL – Write variable values in SQL	DEV, SRV	ZS12-DRV-ExportSQL	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
SQL Driver	DEV, SRV	ZS12-DRV-SQLDRV	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
straton NG driver	DEV, SRV	ZS12-DRV-StratonNG	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Telco200 driver	DEV, SRV	ZS12-DRV-TELCO_32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
TI 505 – 545 driver	DEV, SRV	ZS12-DRV-TI500	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Trend – Trend Driver	DEV, SRV	ZS12-DRV-TREND32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Trend – Trend NG driver	DEV, SRV	ZS12-DRV-TrendNG	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
TwinCat NG driver	DEV, SRV	ZS12-DRV-BeckhNG	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
VDMA-XML driver	DEV, SRV	ZS12-DRV-VDMA_XML	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
VIPA CE touchpanel driver	DEV, SRV	ZS12-DRV-VIPA32	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Volkswagen – Internal, time stamp	DEV, SRV	ZS12-DRV-Reflect	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
zenon Logic driver	DEV, SRV	ZS12-DRV-STRATON	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
zenon Remote Runtime driver	DEV, SRV	ZS12-DRV-RemoteRT	◦(1 incl.)	◦	◦	◦	•	◦	•	•	•	•
Energy drivers												
DNP3 – DNP3 3rd generation driver	DEV, SRV	ZS12-DRV-DNP3_TG		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
IEC – IEC 60870-5-103 driver	DEV, SRV	ZS12-DRV-IEC870-103		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
IEC – IEC 61499 driver	DEV, SRV	ZS12-DRV-IEC61499		◦(max. 1)	◦(max. 1)	◦	•	◦	•	•	◦(max. 1)	
IEC 61400-25-4 Annex C drv.	DEV, SRV	ZS12-DRV-IEC61400-25-4-C		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
IEC 61850 client driver	DEV, SRV	ZS12-DRV-IEC61850		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
IEC60870-5-101_104 driver	DEV, SRV	ZS12-DRV-IEC870		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
IEC-62056-21 Driver	DEV, SRV	ZS12-DRV-IEC62056		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
Modbus Energy driver	DEV, SRV	ZS12-DRV-MODBUS_E		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
OCPP – Open Charge Point Protocol	DEV, SRV	ZS12-DRV-OCPP		◦(max. 1)	◦(max. 1)	•	•	•	•	•	◦(max. 1)	
Process Gateways												
OPC DA Server	DEV, SRV, CL	ZS12-GW-OPC	◦	◦	◦	◦	◦	◦	•	◦	•	•
OPC UA Server	DEV, SRV, CL	ZS12-GW-OPCUA	◦	◦	◦	◦	◦	◦	•	◦	•	•
MODBUS Slave	DEV, SRV, CL	ZS12-GW-MODBUS	◦	◦	◦	◦	◦	◦	•	◦	•	◦
DEC SLAVE	DEV, SRV, CL	ZS12-GW-DEC	◦	◦	◦	◦	◦	◦	•	◦	•	◦
SNMP SERVER/AGENT	DEV, SRV, CL	ZS12-GW-SNMP	◦	◦	◦	◦	◦	◦	•	◦	•	◦
DNP3 SLAVE/OUTSTATION	DEV, SRV, CL	ZS12-GW-DNP3	◦	◦	◦	◦	◦	◦	•	◦	•	◦
SQL ONLINE	DEV, SRV, CL	ZS12-GW-SQL	◦	◦	◦	◦	◦	◦	•	◦	•	◦
ICCP/TASE.2/IEC 60870-6	DEV, SRV, CL	ZS12-GW-ICCP	◦	◦	◦	◦	◦	◦	•	◦	•	◦
IEC60870 Slave	DEV, SRV, CL	ZS12-GW-IEC60870SL	◦	◦	◦	◦	◦	◦	•	◦	•	◦
MS Azure	DEV, SRV, CL	ZS12-GW-AZU	◦	◦	◦	◦	◦	◦	•	◦	•	◦

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— Editions and Options

Feature	licensed on ⁽¹⁾ ABB ID	ZSE-OP	ZSE-SU	ZES-DV	ZEE-SRV	ZEE-CLT	ZEE-DV	ZDMS SRV	ZDMS CL	ZDMS DV	ZSU PACK
Web functionality											
Runtime connection		◦	◦	◦	◦	◦	•	•	•	•	◦
Runtime screen features limited											
zen runtime screen features full											
HTML5 Web Engine											
HTTP tunneling											
Redundancy											
Routing											
Support for MS IE											
Support for MS IE, MS EDGE, Mozilla Firefox, Apple Safari, Google Chrome											
Secure web communication											
Web Read Access to Process Data											
Web Write Access to Process Data											
Logic											
Logic Runtime with 8 TAGs	DEV, SRV	•	•	•			•			•	•
Logic Runtime	DEV, SRV	ZSE12-LO-N	◦	◦	◦	•	◦	•		◦	•
Logic workbench	DEV, SRV				•		•			•	•
Logic Monitoring Builder	DEV, SRV				•		•			•	•
Logic Monitoring Viewer	DEV, SRV		•	•	•		◦	•		◦	•
Logic drivers											
Logic Profibus Master driver	DEV, SRV	ZS12-LODRV-ProfDP	•	•	•	•	•	•	•	•	•
Logic Profinet IO RT Controller driver	DEV, SRV	ZS12-LODRV-PROFINETIORT	•	•	•	•	•	•		•	•
Logic Profinet IO RT Device driver	DEV, SRV	ZS12-LODRV-PNIODEV	•	•	•	•	•	•	•	•	•
Logic Ethernet/IP Scanner driver	DEV, SRV	ZS12-LODRV-EIPC	•	•	•	•	•	•	•	•	•
Logic Ethernet/IP Point IO driver	DEV, SRV	ZS12-LODRV-EIPFIO	•	•	•	•	•	•	•	•	•
Logic Ethernet/IP Adapter driver	DEV, SRV	ZS12-LODRV-EIPS	•	•	•	•	•	•	•	•	•
Logic Ethernet/IP Tag Client driver	DEV, SRV	ZS12-LODRV-EIPTag	•	•	•	•	•	•	•	•	•
Logic Modbus Master driver	DEV, SRV	ZS12-LODRV-MBMASTER	•	•	•	•	•	•	•	•	•
Logic Modbus Slave driver	DEV, SRV	ZS12-LODRV-MBSLAVE	•	•	•	•	•	•	•	•	•
Logic EtherCAT Master driver	DEV, SRV	ZS12-LODRV-Ethercat	•	•	•	•	•	•	•	•	•
Logic Open Powerlink Master driver	DEV, SRV	ZS12-LODRV-OpenEPL	•	•	•	•	•	•	•	•	•
Logic energy drivers											
Logic IEC61850 Client driver	DEV, SRV	ZS12-LODRV-850CL		◦	◦	•	◦	•	•	◦	•
Logic IEC61850 Server + GOOSE driver	DEV, SRV	ZS12-LODRV-850SeGo		◦	◦	•	◦	•	•	◦	•
Logic IEC60870 Master driver	DEV, SRV	ZS12-LODRV-870M101104		◦	◦	•	◦	•	•	◦	•
Logic IEC60870 Slave driver	DEV, SRV	ZS12-LODRV-870S101104		◦	◦	•	◦	•	•	◦	•
Logic DNP3 Master driver	DEV, SRV	ZS12-LODRV-DNP3MCD		◦	◦	•	◦	•	•	◦	•
Logic DNP3 Slave/Outstation driver	DEV, SRV	ZS12-LODRV-DNP3SCD		◦	◦	•	◦	•	•	◦	•
Logic IEEEC37.118 Client driver	DEV, SRV	ZS12-LODRV-IEEEEC37118CI		◦	◦	◦	◦	•	•	◦	•
Logic IEEEC61850-90-5 Client	DEV, SRV	ZS12-LODRV-IEEC850905CI		◦	◦	◦	◦	•	•	◦	•
Report Engine											
0,3 pkt			•	•	•	•	•	•	•	•	•
Report Engine Server	ZRE12-SRV		◦	◦	◦	◦	◦	◦	◦	◦	◦
Report Engine Client	ZRE12-CL-X		◦	◦	◦	◦	◦	◦	◦	◦	◦

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Supported operating systems

Listed below, an overview of the supported Windows operating systems.

For specific information about the operating systems and CPU type, please refer to our

ABB Ability™ zenon documentation. It is recommended to use the latest version of Windows and Windows server.

Operating system	Engineering Studio	Service Engine	Logic Service	Report Engine	Smart Server	Smart Client	Web Visualization Service	IIoT Services
Windows 10 x64 from version 1607 (Pro, Enterprise)	•	•	•	•	•	•	•	•
Windows 10 x64 from version 2016 (Enterprise LTSC, IoT Enterprise LTSC)	•	•	•	•	•	•	•	•
Windows 11 x64 from 21H2 (Pro, Enterprise)	•	•	•	•	•	•	•	•
Windows Server 2016 x64 from version 1809 (All editions with the exception of Core)	•	•	•	•	•	•	•	•
Windows Server 2019 x64 from version 1809 (All editions with the exception of Core)	•	•	•	•	•	•	•	•
Windows Server 2022 x64 (All editions with the exception of Core)	•	•	•	•	•	•	•	•
Ubuntu 22.04, amd64			•					
Raspberry Pi OS (64-bit) 11, arm 64			•					

- Support
- Note: Service pack requirements may be applied. Please refer to the installation guide for ABB Ability™ zenon setup.

Hardware requirements

Editor
The installation of Editor provides the hardware minimum requirements.

For large projects that are loaded at the same time, you need correspondingly faster /stronger hardware. You can increase the minimum requirements by doing this.

— Hardware Requirements Editor

Hardware	Minimum requirements	Recommended
CPU	Single core with SSE2 support.	Quad Core
Memory	From 4 GB	8 GB
Storage medium	The more projects you have simultaneously available in memory, the more memory you need. 20 GB of free memory is required to install the entire Software Platform. In addition, free memory is required for projects.	
Monitor resolution	The following applies for individual installations: Engineering Studio: 10 GB Service Engine: 6 GB Report Engine: 7 GB Reporting Studio: 4 GB Smart Server: 2 GB Smart Client: 3 GB IIoT Services: 4 GB License Management: 1 GB Extended VGA with 1024 × 768 pixels.	Double monitor setup: 2 times 1920 × 1080.
Graphics adapter	Some dialogs, e.g. the filter of the AML/CEL image, are difficult to operate or possibly non-operable at a height of less than 850 pixels.	
Input devices	64MB dedicated memory. Cards with shared memory can lead to performance loss.	
USB interface or DVD drive	Standard keyboard or standard mouse.	
Parallel or USB interface	For the installation, regardless of installation medium. The installation is also possible via network. Installation files can also be downloaded from the customer area of the COPA-DATA website.	
Network connection (optional)	In case of dongle licensing required for dongle. For network dongle only required for the dongle server.	
	Recommended 10 MBit/s with TCP/IP protocol for Remote Transport, network dongle, project backups on central file server, multi-user capable Engineering Studio, etc.	1000 MBit/s

Runtime

The minimum requirements are based on installation of Runtime. For large projects that are

loaded at the same time, you need correspondingly faster/stronger hardware. You can increase the minimum requirements by doing this.

Hardware Requirements Runtime

Hardware	Minimum requirements	Recommended
CPU	Single core with SSE2 support.	Quad Core
Memory	From 512MB Note: Projects with large amounts of data, network projects, several parallel projects and projects in redundant operation require more memory.	4 GB
Storage medium	20 GB of free memory is required to install the entire ABB Ability™ zenon Software Platform. In addition, free memory is required for projects. The following applies for individual installations: Engineering Studio: 10 GB Service Engine: 6 GB Report Engine: 7 GB Reporting Studio: 4 GB Smart Server: 2 GB Smart Client: 3 GB IIoT Services: 4 GB License Management: 1 GB Attention: If you log historical data (e.g. Archive data or Alarm/ CEL data), there will need to be sufficient memory available or the configuration has to ensure that the historical data is evacuated or deleted.	
Monitor resolution	Extended VGA with 1024 × 768 pixels. Some dialogs, e.g. the filter of the AML/ CEL image, are difficult to operate or possibly non-operable at a height of less than 850 pixels. The minimum recommended resolution in Service Engine is 1024 × 768 pixels. Smaller resolutions can also be configured. However it may then not be possible to operate some online dialogs. If these are not used, the resolution can be selected as lower.	
Graphics adapter	64 MB dedicated memory. Cards with shared memory can lead to performance loss.	
Input devices	Keyboard and/ or mouse. Operation via touchscreen is also possible. Many individual, customizable softkeyboards for the touchscreen are available for you. In addition, there is the possibility of Multi-Touch operation.	
USB interface	For the installation, regardless of installation medium. The installation is also possible via network. Installation files can also be downloaded from the customer area of the COPA-DATA website.	
Network connection (optional)	64 kBits / s for standard Client/ Server projects. 100 Mbit/ s full duplex for redundant operation.	1000 kBits/ s full duplex for standard Client/ Server projects.
Remote connection (optional)	Dial-up modem with 9600 Bit/ s.	1 Mbit/ s full duplex.
WAN connection (optional)	Any desired connection via router, e.g. by means of ISDN or DSL. Data transfer is slower in a WAN than in a local network for technical reasons. Be sure to check the possible data transfer rates of your WAN technology already at the time when you create the project.	
Interfaces (optional)	The necessary interfaces depend on the requirements of the PLC and/ or the bus connection, for example serial RS232 or RS422/ 485 interfaces, ISA/ PCI slots, etc.	

Hardware	Minimum requirements	Recommended
CPU	XEON processor	CPU XEON (maximum 24 cores/ 4 sockets)
Memory	32 GB	64 GB or larger
Storage medium	1 TB	1 TB or more (depending on the data to be saved)
CPU	Single core with SSE2 support.	Quad Core
Memory	From 1024 MB	
Storage medium	256 MB free storage	
Network connection	10 Mbit/ s full duplex	
Remote connection (optional)	Dial-up modem with 9600 Bit/ s.	

Standard



ABB Ability™ zenon provides a secure, scalable software platform featuring HMI, SCADA, Soft PLC, M2M communication, Batch, Scheduling, Energy and Maintenance Management for manufacturing, buildings and infrastructure. ABB Ability™ zenon offers industry leading communication, visualization and control, with a proven track record of engineering efficiencies, operational excellence, and cost effectiveness.

ABB Ability™ zenon Edition – Operator

Easy and intuitive handling, safe operation and ergonomic control

ABB Ability™ zenon Operator provides HMI functionalities for simple and intuitive control of machines and equipment. Operator is orientated to the requirements of modern ergonomics and usability. Automated switching of languages and measuring units allows it to be easily used in an international setting. Color palettes allow individual design and quick adaptation to changing conditions of use on a click. Consistent reusability and a flexible alarm management serve to optimize configuration and operation. An IEC 61131-3-based soft PLC system for logical data processing is integrated. Remote maintenance functions allow for a cost effective management of production assets. Hot reloading ensures continuous production even during configuration changes.

Advantages for the user:

- Cost effective Visualization, Alarm and Event Managent and Control for Machines and Equipment
- Optimum usability including Multitouch gestures
- Two hand operation for safe control
- Multi Language support, Units, Color Palettes
- Remote maintenance and hot reload

Remarks

- Including one PLC or bus driver
- Energy (870-101/103/104, 850, DNP3, Mod-bus Energy), CTI driver are not available
- Only one instance per driver
- Redundancy requires Supervisor
- Distributed and collaborative engineering are not included
- No support for VBA in the Runtime

Operator Runtime Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053001R1200	ZSE12-OP-64	Operator Runtime 64 Tags
1SAS053002R1200	ZSE12-OP-128	Operator Runtime 128 Tags
1SAS053003R1200	ZSE12-OP-256	Operator Runtime 256 Tags
1SAS053004R1200	ZSE12-OP-512	Operator Runtime 512 Tags
1SAS053005R1200	ZSE12-OP-1024	Operator Runtime 1024 Tags
1SAS053006R1200	ZSE12-OP-2048	Operator Runtime 2048 Tags
1SAS053007R1200	ZSE12-OP-4096	Operator Runtime 4096 Tags

ABB Ability™ zenon Edition – Supervisor

Delivering strong performance. Securely. Visualize, control and optimize complex production facilities with ABB Ability™ zenon Supervisor. Supervisor is the ideal choice for maximum security and optimal connectivity to existing equipment environments.

Information
The Supervisor turns production data into information. With its more than 300 supported communication protocols, the Supervisor natively connects to nearly any existing automation and control infrastructure. Once refined in the Supervisor, your production information provides insight and control over your production assets.

Integrity
ABB Ability™ zenon Supervisor network technology with seamless redundancy guarantees comprehensive data security, maximum availability without downtimes and no loss of valuable production data. ABB Ability™ zenon is continually being adapted to modern security standards to provide stable and secure plant operation. ABB Ability™ zenon is the solution for critical infrastructure.

Insight
ABB Ability™ zenon Supervisor informs of what is happening in your production at all details you require. Starting with local HMI and operator workplaces, to Alarm, Events and Historian Data Management, to effective reports and calculating complex KPIs such as OEE. Make most of your production assets through outstanding transparency for continuous and batch operation, and maintenance.

Engineering and Maintenance
Projects can be highly customized, using available templates and wizards. Already created objects can be reused in other projects. When working in teams, the multi-project administration, version management and the history of the changes in engineering give an overview of all activities. API interfaces are available for automation of engineering processes. The Hot Reload enables changes to be made during production.

- Benefits:**
- Full data security, maximum availability without downtimes and no loss of data
 - Integrating with existing operations and management environments through outstanding connectivity
 - Develop individual projects, use available templates and intelligent wizards
 - Efficient and transparent engineering through collaboration, version control, change history
 - Remote access to projects and equipment
 - Effective reporting

Supervisor Runtime Licenses		
ABB Order ID	ABB ID	PRODUCT
1SAS053033R1200	ZSE12-SU-128	Supervisor Runtime 128 Tags
1SAS053034R1200	ZSE12-SU-256	Supervisor Runtime 256 Tags
1SAS053035R1200	ZSE12-SU-512	Supervisor Runtime 512 Tags
1SAS053036R1200	ZSE12-SU-1024	Supervisor Runtime 1024 Tags
1SAS053037R1200	ZSE12-SU-2048	Supervisor Runtime 2048 Tags
1SAS053038R1200	ZSE12-SU-4096	Supervisor Runtime 4096 Tags
1SAS053039R1200	ZSE12-SU-8192	Supervisor Runtime 8192 Tags
1SAS053040R1200	ZSE12-SU-16384	Supervisor Runtime 16384 Tags
1SAS053041R1200	ZSE12-SU-65536	Supervisor Runtime 65536 Tags
1SAS053205R1200	ZSE12-SU-131070	Supervisor Runtime 131070 Tags
1SAS053042R1200	ZSE12-SU-UNLMTD	Supervisor Runtime Unlimited Tags
1SAS053207R1200	ZSE12-SU-PACK	Supervisor Runtime Unlimited Pack

Supervisor Developer Licenses		
ABB Order ID	ABB ID	PRODUCT
1SAS050049R1200	ZES12-DV-1024	Supervisor Development 1024 Tags
1SAS050050R1200	ZES12-DV-2048	Supervisor Development 2048 Tags
1SAS050051R1200	ZES12-DV-4096	Supervisor Development 4096 Tags
1SAS050052R1200	ZES12-DV-8192	Supervisor Development 8192 Tags
1SAS050053R1200	ZES12-DV-16384	Supervisor Development 16384 Tags
1SAS050054R1200	ZES12-DV-65536	Supervisor Development 65536 Tags
1SAS050113R1200	ZES12-DV-131070	Supervisor Development 131070 Tags
1SAS050055R1200	ZES12-DV-UNLMTD	Supervisor Development Unlimited Tags
1SAS050109R1200	ZES12-DV-PACK	Supervisor Development Package Unlimited Tags

Modules

Modules extend the function of the ABB Ability™ zenon Service Engine. Depending on the Module function, it needs to be licensed on the Stand-alone, Server, and/or Client nodes.

Recipe Group Manager (ZS12-RGM)
The ABB Ability™ zenon Recipe Group Manager offers recipe management for basic batch production or startup/shutdown sequences.

Live validation and validation before saving a recipe and set values via screen elements provide high usability.

The module has to be licensed in the Engineering and in the Runtime (Standalone, Server and Client).

Message Control (ZS12-MC)
ABB Ability™ zenon Message Control automatically notifies and informs users and decision makers independent of their current location by SMS, eMail or voice message. The message transmission status is traced in the ABB Ability™ zenon Event List. Through mobile access via a web server or smartphone gateway, situational awareness and effective reactions can be issued – from wherever you are.

The module has to be licensed in the Engineering and in the Runtime (Standalone and Server).

Reporting (ZS12-REPORT)
ABB Ability™ zenon Report serves as documentation, evaluation and presentation of process data on the basis of online and archive data. Report is the transparency tool that generates insight out of production data. The report generator meets the requirements of different standards like ATV H260.

Trend and Historian – Starter Edition (ZS12-ARVETM-SE)
The entry level archive allows for the cyclic recording of selected variables and the function triggered data export to XML or ASCII. Archived and online values can be displayed and analyzed with up to 8 curves in a trend display.

This module is included as standard in the Supervisor. For the Operator, this module is licensed as an option in the Operator Runtime.

Historian (ZS12-ARCHEXP)
ABB Ability™ zenon Historian archives realtime data for further processing and evaluation – also outside of ABB Ability™ zenon. The module

provides event driven and cyclic recording, unlimited archive capacity, optional cloud connectivity, reporting based on Historian, and extraction of archives to a SQL database. The module has to be licensed in the Development Environment and in the Runtime (Standalone and Server).

Historian SQL Server Interface (ZS12-ZSQLSRV)
The Historian SQL Server Interface allows transparent extraction of archive data into any OLE DB-compatible SQL database. Archive data can be written directly to an SQL database by the Historian module after a freely definable time. The reference to the original archive data is retained. As a result, numerous ABB Ability™ zenon modules (ETM, Report Generator, etc.) can transparently access data evacuated in this way, for reporting and trend monitoring.

The module has to be licensed in the Development Environment and in the Runtime (Standalone and Server) and is only available in the ABB Ability™ zenon Supervisor.

This module requires the Historian (ZS12-ARCHEXP).

Extended Trend (ZS12-ETM)
ABB Ability™ zenon Extended Trend is used to visualize time series data.

The Trend provides ruler and zoom functions with trend analysis. Users can enlarge, search, filter, query and scale online values and values from the archives.

The module has to be licensed in the Development Environment and in the Runtime (Standalone, Server and Client).

Production and Facility Scheduler (ZS12-PFS)
The ABB Ability™ zenon Production and Facility Scheduler (PFS) serializes and orchestrates equipment and production processes, depending on the time, event and production status. Maintenance, CIP and other non-productive tasks can be scheduled at optimal times. For equipment with heavy consumption, a considerable increase in the OEE and energy savings can be achieved.

Industrial Maintenance Manager (ZS12-IMM)
The ABB Ability™ zenon Industrial Maintenance Manager supports the planning, visualization and administration of production maintenance and service. All maintenance activities are recorded and available for reporting.

Modules

The module stores the data in any desired OLE DB compatible SQL database (not supplied). The module has to be licensed in the Engineering and in the Runtime (Standalone, Server/Standby, Client)

The module is only available for the ABB Ability™ zenon Supervisor.

SAP Interface (ZS12-SAP)
The ABB Ability™ zenon SAP Interface provides SAP users with direct access to the process level for ABB Ability™ zenon, and offers ABB Ability™ zenon users access to just-in-time production and long-term planning data in SAP.

This module is licensed in the Engineering and in the Runtime (Standalone, Server/Standby).

Process Recorder (ZS12-PR)
The ABB Ability™ zenon Process Recorder records and plays back the production history in ABB Ability™ zenon Process Screens, for training or process forensics. The ABB Ability™ zenon Process Recorder supports Extended Trend, Alarm Message List (AML), or Chronological Event List (CEL), for enhanced precise error analysis.

The Process Recorder is licensed on the Server, Standby and the Engineering. This module automatically activates the Project Simulation module, and it is only available for the ABB Ability™ zenon Supervisor.

Load Management (ZS12-EMS)
The ABB Ability™ zenon Load Management supports the energy supply management for small and medium-sized presuming companies. Energy trend calculations are used for the automated optimization of energy consumption and contracts management.

The Load Management forecasts loads (short-term forecast) to avoid load peaks and to automate load shedding. It provides optimization of the averaged energy consumption of a billing period.

The Load Management has to be licensed in the Engineering and in the Runtime (Standalone and Server). It is only available for the ABB Ability™ zenon Supervisor.

3D Integration (ZS12-3D)
The ABB Ability™ zenon 3D Integration visualizes 3D models and connects 3D elements to Alarms, Events and Variable values for color change, object linking, display, and user interaction. Pre-defined camera positions can be configured.

3D Integration renders Step, 3DS and DWFX 3D files.

The module has to be licensed in the Engineering.

GIS Editor and Control (ZS12-GIS)
The ABB Ability™ zenon GIS (Geographical Information System) displays realtime operations, alarm and event information on a geographical map.

The ABB Ability™ zenon GIS Editor supports adding dynamic elements to layers on a map, as well as reading geographical and onject information from KML files.

The module has to be licensed in the Engineering and in the Runtime (Standalone and Server/Standby), and it is only available for the ABB Ability™ zenon Supervisor.

Module Licenses		
ABB Order ID	ABB ID	PRODUCT
1SAS053174R1200	ZS12-3D	3D Integration
1SAS053193R1200	ZS12-ARCHEXP	Historian with SQL Export
1SAS053024R1200	ZS12-ARVETM-SE-OP	Extended Trend & Historian Starter Edition for Operator
1SAS053053R1200	ZS12-ETM	Extended Trend
1SAS056444R1200	ZS12-ESIG	Electronic Signature
1SAS053243R1200	ZS12-GIS	GIS Editor and Control
1SAS053028R1200	ZS12-MC	Message Control
1SAS053438R1200	ZS12-MTP	Module Type Package Studio
1SAS053059R1200	ZS12-PFS	Production and Facility Scheduler
1SAS050033R1200	ZS12-PLC-DIAG	PLC Diagnosis
1SAS053203R1200	ZS12-PR	Process Recorder
1SAS053027R1200	ZS12-REPORT	Reporting
1SAS053026R1200	ZS12-RGM	Recipegroup Manager
1SAS053242R1200	ZS12-SAP	SAP Interface
1SAS053054R1200	ZS12-ZSQLSRV	Historian SQL Server Interface

Batch Control

Batch-oriented production with ABB Ability™ zenon
Batch Control provides the option to automate batch-oriented manufacturing processes. The module complies with ANSI/ISA-S95 standards. Batch Control in ABB Ability™ zenon creates an environment with multi-touch technology that provides complete equipment and process control with advanced and direct interfaces. These help you to control the performance and monitoring of both new and existing processes. The module has to be licensed in the Development Environment and in the Runtime (Standalone and Server).

The module is only available for the ABB Ability™ zenon Supervisor.

- Benefits:**
- ISA-88 and ANSI/ISA S95 compliant
 - FDA 21 CFR Part 11 compliant
 - Fully integrated with ABB Ability™ zenon
 - Hardware independent
 - Network-capable
 - Graphical user interface for high usability and simple handling

- Batch Control Starter Edition (ZS12-BASE)**
- Matrix display of the recipes
 - Phase status
 - Live tool tip information
 - Simultaneous operations
 - Current and historical timeouts
 - Recipe mode and status

- Batch Control Professional Edition (ZS12-BAPRO)**
- Includes all features of Batch Control Starter Edition
 - Batch processing ISA 88 user interface
 - Full-graphic PFC view
 - Batch Control Starter Edition
 - Phase status
 - Live tool tip information
 - Simultaneous operations
 - Sequence decisions
 - Unit reservation
 - Loop states
 - Current and historical timeouts
 - Recipe mode and status

Batch Control Licenses Module Licenses		
ABB Order ID	ABB ID	PRODUCT
1SAS053074R1200	ZS12-BAPRO-5	Batch Control Professional 5 Units
1SAS053075R1200	ZS12-BAPRO-10	Batch Control Professional 10 Units
1SAS053076R1200	ZS12-BAPRO-20	Batch Control Professional 20 Units
1SAS053077R1200	ZS12-BAPRO-50	Batch Control Professional 50 Units
1SAS053078R1200	ZS12-BAPRO-UNLMTD	Batch Control Professional Unlimited Units
1SAS053060R1200	ZS12-BASE-5	Batch Control Starter Edition 5 Units
1SAS053061R1200	ZS12-BASE-10	Batch Control Starter Edition 10 Units
1SAS053062R1200	ZS12-BASE-20	Batch Control Starter Edition 20 Units
1SAS053063R1200	ZS12-BASE-50	Batch Control Starter Edition 50 Units
1SAS053064R1200	ZS12-BASE-UNLMTD	Batch Control Starter Edition Unlimited Units

Additional information
A “unit” is a device that uses Batch Control. Attention: A maximum of one recipe can be executed on a unit at any time.

Example: 3 mixers can be defined as a single unit. However, only one recipe can be executed. If only one recipe is to be executed on each mixer (simultaneously), each mixer must be defined as an aggregate.

Logic

Completely integrated

ABB Ability™ zenon Logic is an IEC61131-3 soft PLC runtime for calculation, simulation and control, commissioning and automated testing in ABB Ability™ zenon.

Logic is connects to the ABB Ability™ zenon Service Engine through shared variable spaces or Drivers and an integrated Engineering

Real-time operations on any device

Logic offers an integrated realtime PLC system that lets you access any hardware, such as I/O modules, sensors, actors. Profinet, Ethernet/IP, Ethercat, CANbus, OPC UA, DNP3, IEC60870, and IEC61850 are some of the supported communication protocols.

Engineering Efficiency

As an efficient IEC 61131-3 programming environment, ABB Ability™ zenon Logic offers you the most widely used languages (IL, ST, LD, FBD/CFE and AS).

Logic runs on Windows and Linux environments.

Advantages:

- Lists of data are no longer listed twice
- Considerable time savings
- Full access to a variety of 300 communication protocols, including Profinet and Ethernet/IP, IEC61850, DNP3, BACnet and KNX
- High degree of reliability when configuring projects and putting them into operation
- Programmed driver simulation: PLC code without testing hardware
- Suitable for open platforms

Logic Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053093R1200	ZSE12-LO-64	Logic Runtime 64 Tags
1SAS053094R1200	ZSE12-LO-128	Logic Runtime 128 Tags
1SAS053095R1200	ZSE12-LO-256	Logic Runtime 256 Tags
1SAS053096R1200	ZSE12-LO-512	Logic Runtime 512 Tags
1SAS053097R1200	ZSE12-LO-1024	Logic Runtime 1024 Tags
1SAS053098R1200	ZSE12-LO-2048	Logic Runtime 2048 Tags
1SAS053099R1200	ZSE12-LO-4096	Logic Runtime 4096 Tags
1SAS053100R1200	ZSE12-LO-8192	Logic Runtime 8192 Tags
1SAS053101R1200	ZSE12-LO-16384	Logic Runtime 16384 Tags
1SAS053102R1200	ZSE12-LO-65536	Logic Runtime 65536 Tags
1SAS053103R1200	ZSE12-LO-UNLMTD	Logic Runtime Unlimited Tags
1SAS053408R1200	ZSE12-LO-LINUX-UNLMTD	Logic Service Engine for Linux

Drivers

Drivers connect the ABB Ability™ zenon Runtime to subordinated systems. Drivers are Services that run inside the ABB Ability™ zenon Service Engine. The ABB AC500 Driver, as well as internal, simulator, system, mathematics and Generic

Drivers Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS056001R1200	ZS12-DRV-3S_Arti_NG	3S Codesys Arti NG SoftPLC Driver
1SAS056002R1200	ZS12-DRV-3S_V3	3S Codesys V3 Driver
1SAS056003R1200	ZS12-DRV-CS3132	ABB 07KT94 Driver
1SAS056276R1200	ZS12-DRV-AC500	ABB AC500 Driver
1SAS056278R1200	ZS12-DRV-COMLI	ABB COMLI Communication Link Driver
1SAS056281R1200	ZS12-DRV-PHLOEM	ABB PHLOEM Protocol Driver
1SAS056010R1200	ZS12-DRV-ALLEND1	Allen Bradley DF1 Driver
1SAS056009R1200	ZS12-DRV-ALLENBNT	Allen Bradley RS Linx Driver
1SAS056011R1200	ZS12-DRV-LOGIX_ODVA	Allen-Bradley ODVA Driver
1SAS056434R1200	ZS12-DRV-APPL	Applicom Driver
1SAS056036R1200	ZS12-DRV-ARCHDRV	Archive Driver (RAW)
1SAS056021R1200	ZS12-DRV-MINI32	B&R Mininet Master Driver
1SAS056022R1200	ZS12-DRV-BUR20032	B&R PVI based Driver
1SAS056024R1200	ZS12-DRV-BURPVI	B&R PVI based Driver
1SAS056023R1200	ZS12-DRV-BURTCP	B&R TCP-IP Driver
1SAS056025R1200	ZS12-DRV-BuR41xx32	B&R Transponder Reader 4102/4150
1SAS056017R1200	ZS12-DRV-BACH	Bachmann M1 Driver
1SAS056018R1200	ZS12-DRV-BACNETNG	BACnet Next Generation Driver
1SAS056019R1200	ZS12-DRV-BECKH9000	Beckhoff BC-BK 9000 Driver
1SAS056437R1200	ZS12-DRV-BECKH32	Beckhoff TwinCat ADS Driver
1SAS056020R1200	ZS12-DRV-BeckhNG	Beckhoff TwinCat Next Generation Driver
1SAS056028R1200	ZS12-DRV-SYS2000	Brodersen System 2000 Driver
1SAS056029R1200	ZS12-DRV-SYSLOG	Brodersen System 2000 with Logging Driver
1SAS056047R1200	ZS12-DRV-CTI	CTI Driver
1SAS056055R1200	ZS12-DRV-DNP3_TG	DNP3 Third Generation Driver
1SAS056062R1200	ZS12-DRV-ESSER32	Esser BMZ 8000 Driver
1SAS056063R1200	ZS12-DRV-EUCH	Euchner Ident System Driver
1SAS056284R1200	ZS12-DRV-EUROMAP63	EUROMAP63 Driver
1SAS056058R1200	ZS12-DRV-EIBV2_32	European Installation Bus/EIB/KNX Driver
1SAS056279R1200	ZS12-DRV-DATEI32	File Driver
1SAS056072R1200	ZS12-DRV-GE_S RTP	GE SRTP Driver
1SAS056282R1200	ZS12-DRV-CAN	Generic CAN bus Driver
1SAS056083R1200	ZS12-DRV-CIF32	Hilscher CIF Driver
1SAS056079R1200	ZS12-DRV-OPENMPI	Hilscher MPI Driver
1SAS056084R1200	ZS12-DRV-HITA	Hitachi Driver
1SAS056085R1200	ZS12-DRV-Hydrometer	Hydrometer Driver
1SAS056087R1200	ZS12-DRV-IBHRTSPS	IBH Soft PLC Driver
1SAS056177R0820	ZS12-DRV-FMSNT	Profibus FMS over Siemens PC card
1SAS056072R0820	ZS12-DRV-GE_S RTP	GE SRTP Driver

NET drivers are supplied free of charge with the ABB Ability™ zenon Development Environment and ABB Ability™ zenon Runtime. All other drivers require a license in the ABB Ability™ zenon Development Environment and ABB Ability™ zenon Runtime.

ABB Order ID	ABB ID	PRODUCT
1SAS056084R1200	ZS12-DRV-HITA	Hitachi Driver
1SAS056085R1200	ZS12-DRV-Hydrometer	Hydrometer Driver
1SAS056087R1200	ZS12-DRV-IBHRTSPS	IBH Soft PLC Driver
1SAS056089R1200	ZS12-DRV-IDEC	Idec Driver
1SAS056012R1200	ZS12-DRV-IEC60870	IEC 60870-5-101_104 Driver
1SAS056092R1200	ZS12-DRV-IEC60870-103	IEC 60870-5-103 Driver
1SAS056007R1200	ZS12-DRV-IEC61400-25-4-C	IEC 61400-25-4 Annex C Connection
1SAS056094R1200	ZS12-DRV-IEC61499	IEC 61499 Driver
1SAS056005R1200	ZS12-DRV-IEC61850	IEC 61850 Driver
1SAS056093R1200	ZS12-DRV-IEC62056	IEC 62056-21 Driver
1SAS056057R1200	ZS12-DRV-LON100	i-LON 100 Driver
1SAS056048R1200	ZS12-DRV-INTEGRA	Integra Driver
1SAS056265R1200	ZS12-DRV-Reflect	Internal Driverwith Time Stamp
1SAS056107R1200	ZS12-DRV-Jetter	Jetter Driver
1SAS056108R1200	ZS12-DRV-KabaDPServer	Kaba Data Point Server Driver
1SAS056114R1200	ZS12-DRV-KDNP1	Kepco KDNP1 Driver
1SAS056127R1200	ZS12-DRV-LS_XGT	LS Industrial Systems XGT Driver
1SAS056128R1200	ZS12-DRV-Masterbus	Mastervolt MasterBus Driver
1SAS056133R1200	ZS12-DRV-AzureDrv	Microsoft Azure Driver
1SAS056134R1200	ZS12-DRV-MITSUB	Mitsubishi Melsec A-Q Driver
1SAS056135R1200	ZS12-DRV-MITFX	Mitsubishi Melsec FX Driver
1SAS056006R1200	ZS12-DRV-MODBUS_E	Modbus Energy Driver
1SAS056004R1200	ZS12-DRV-MODRTU32	Modbus RTU and Open Modbus TCP Driver
1SAS056140R1200	ZS12-DRV-PSUNI32	Moeller Electric PSUNI Driver
1SAS056008R1200	ZS12-DRV-NMEA2000	NMEA 2000 Bus Driver
1SAS056433R1200	ZS12-DRV-OCPP	OCPP Driver
1SAS056158R1200	ZS12-DRV-OMRON32	Omron Driver
1SAS056285R1200	ZS12-DRV-OMRONEIP	Omron EIP Driver
1SAS056159R1200	ZS12-DRV-OMRONFINS	Omron FINS Driver
1SAS056038R1200	ZS12-DRV-OPCCLI32	OPC Client V2.0 Driver
1SAS056041R1200	ZS12-DRV-OPCUA	OPC UA Client Driver
1SAS056163R1200	ZS12-DRV-OTIS	Otis Controller Driver
1SAS056129R1200	ZS12-DRV-MATSU32	Panasonic Serial Driver
1SAS056130R1200	ZS12-DRV-MATSUTCP	Panasonic TCP-IP Driver
1SAS056031R1200	ZS12-DRV-MODLISTEN	Passive Modbus RTU Driver
1SAS056123R1200	ZS12-DRV-PCS80732	PCS807 Profibus DP Driver
1SAS056122R1200	ZS12-DRV-PCS812	PCS812 S7 Connectivity Driver
1SAS056292R1200	ZS12-DRV-PADNETPCI	PDNet PCI Driver

Drivers

Drivers Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS056118R1200	ZS12-DRV-Phoenix32	Phoenix Contact Driver
1SAS056168R1200	ZS12-DRV-PSS32	Pilz PSS Driver
1SAS056286R1200	ZS12-DRV-POZYTON	Pozyton Meter Driver
1SAS056291R1200	ZS12-DRV-Prismic	Prismic Event Logger Driver
1SAS056141R1200	ZS12-DRV-DPUNI32	Profibus DP Master Driver
1SAS056178R1200	ZS12-DRV-REIS32	Reis Robotics Driver
1SAS056182R1200	ZS12-DRV-RTK9000	RTK9000 Driver
1SAS056150R1200	ZS12-DRV-MPI	S7 MPI for Siemens CE Terminals Driver
1SAS056184R1200	ZS12-DRV-SADIR	Saia Direct Driver
1SAS056183R1200	ZS12-DRV-SATCP	SAIA2ND32 Driver
1SAS056016R1200	ZS12-DRV-SANORS	SaNORS – Asfinag Emergency Telephone Driver
1SAS056287R1200	ZS12-DRV-SAT	SAT Network Manager Driver
1SAS056198R1200	ZS12-DRV-SEL	SEL Fast Massage Driver
1SAS056288R1200	ZS12-DRV-S-SAT	Siemens Network Manager Driver
1SAS056096R1200	ZS12-DRV-S5H1NT	Siemens S5 H1 Driver
1SAS056213R1200	ZS12-DRV-S5PG32	Siemens S5 PG Driver
1SAS056097R1200	ZS12-DRV-S5TCP32	Siemens S5 TCP-IP Driver
1SAS056218R1200	ZS12-DRV-S7PPI200	Siemens S7 Driverfor S7-200
1SAS056078R1200	ZS12-DRV-S7HMI	Siemens S7 HMI adapter Driver
1SAS056099R1200	ZS12-DRV-S7NT	Siemens S7 Softnet Driver
1SAS056231R1200	ZS12-DRV-S7SPONT	Siemens S7 Spontaneous Driver
1SAS056098R1200	ZS12-DRV-S7TCP	Siemens S7 TCP-IP Driver
1SAS056233R1200	ZS12-DRV-S7TIA	Siemens S7 TIA Driver
1SAS056221R1200	ZS12-DRV-S7DCOS	Siemens Siclimat X Decos Driver
1SAS056283R1200	ZS12-DRV-SIGMASYS	Siemens Sigmasys Driver
1SAS056226R1200	ZS12-DRV-Simotion	Siemens Simotion Driver
1SAS056234R1200	ZS12-DRV-SIGMA32	SIGMATEK Driver
1SAS056235R1200	ZS12-DRV-STLASAL	Sigmathek Lasal Driver
1SAS056236R1200	ZS12-DRV-SINTH	Sinthesi PICnet Driver
1SAS056289R1200	ZS12-DRV-SIPA_32	Sipa Controller Driver

Energy Driver for Supervisor

IEC 61850

The communication between driver and IED is based on the IEC 61850 protocol, using server client services via TCP/IP (profile A1/T1). The driver acts as Client during communication. The driver supports IED time stamping and IED Quality. The IEC 61850 driver is TÜV SÜD certified (Edition 2).

IEC 61400-25-4 ANNEX C

The communication between driver and PLC is based on the IEC 61850 MMS protocol, using server/client services via TCP/IP (profile A1/T1). The driver acts as Client during communication. The driver supports IED time stamping and IED Quality.

IEC 60870-5-101/104

Driver for the communication according to IEC 60870-5-101 (serial) and the IEC 60870-5-104 (TCP/IP) protocol. Driver acts as master (controlling station).

IEC 60870-5-103

Driver for IEC 60870-5-103 communication (for protection relays). Driver acts as Master.

IEC 62056-21

Driver reading the values of energy meters supporting DLMS/COSEM. The driver supports mode C of IEC communication.

Modbus energy

Open Modbus TCP/IP driver with the following differences compared to the standard Modbus driver:

- Channel bundling
- Improved communication with gateways
- Read and write only for Holding Register
- Supports only Open Modbus TCP/IP protocol

Sequence of events (SOE) for:

- AREVA MiCOM 126/127
- GE Multilin F650 and GE UR-series
- ICE NPx800
- Schneider MODICON TSX Premium (COSTRONIC Function block required)

IEEE 1815 DNP3

Driver for communication according to DNP3 (serial and TCP/IP). Driver acts a master for connection to DNP3 outstations.

Energy Driver Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS056055R1200	ZS12-DRV-DNP3_TG	DNP3 Third Generation Driver
1SAS056012R1200	ZS12-DRV-IEC60870	IEC 60870-5-101_104 Driver
1SAS056092R1200	ZS12-DRV-IEC60870-103	IEC 60870-5-103 Driver
1SAS056007R1200	ZS12-DRV-IEC61400-25-4-C	IEC 61400-25-4 Annex C Connection
1SAS056005R1200	ZS12-DRV-IEC61850	IEC 61850 Driver
1SAS056093R1200	ZS12-DRV-IEC62056	IEC 62056-21 Driver
1SAS056006R1200	ZS12-DRV-MODBUS_E	Modbus Energy Driver
1SAS056433R1200	ZS12-DRV-OCPP	OCPP Driver

Process Gateways

Connecting the Internet of Things

Process Gateway connects ABB Ability™ zenon to superordinated systems securely. The ABB Ability™ zenon Process Gateway supports many different standards such as for example OPC UA, SQL, SAP, MS Azure, IEC 60870 Slave, Modbus Slave, DNP3 Slave, SNMP Server. For machine-to-machine communication, ABB Ability™ zenon utilizes standards like Weihenstephan and PackML. Together with more than 300 ABB Ability™ zenon communication protocols and drivers, these make ABB Ability™ zenon the key node in an Internet of Things (IoT) strategy.

Benefits:

- Add-on for the ABB Ability™ zenon Runtime
- Connects to superordinate systems / Connect IT and OT
- Make ABB Ability™ zenon the entry point for your IoT strategy
- Supports many standards such as OPC UA, SQL, SAP, MS Azure, IEC 60870 Slave, Modbus Slave, DNP3 Slave, SNMP Server

Process Gateway Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053092R1200	ZS12-GW-AZU	Process Gateway – MS Azure
1SAS053088R1200	ZS12-GW-DNP3	Process Gateway – DNP3 Slave
1SAS053090R1200	ZS12-GW-ICCP	Process Gateway – ICCP/TASE.2/IEC 60870-6
1SAS053091R1200	ZS12-GW-IEC60870SL	Process Gateway – IEC60870 Slave
1SAS053085R1200	ZS12-GW-Modbus	Process Gateway – Modbus Slave
1SAS053083R1200	ZS12-GW-OPC	Process Gateway – OPC Server
1SAS053084R1200	ZS12-GW-OPCUA	Process Gateway – OPC UA Server
1SAS053087R1200	ZS12-GW-SNMP	Process Gateway – SNMP Server
1SAS053089R1200	ZS12-GW-SQL	Process Gateway – SQL Online
1SAS053271R1200	ZS12-GW-SYSLOG	Process Gateway – zenon Syslog Client

Report Engine

Better business decisions

ABB Ability™ zenon Analyzer – the Dynamic Reporting software bridges the gap between reporting and business intelligence. It can retrieve, process and analyze data seamlessly from all the automated production segments of your equipment and from many other data sources (including manual entry). The information is provided in real-time. The overall status and productivity of the whole facility is available in full picture.

Comprehensive reports

ABB Ability™ zenon Analyzer provides ready-to-use templates like production reports or reports for energy data management. Production reports aggregate information per batch, article, or time filters, and allow for quality documentation or alarm management. For media such as water, energy, compressed air, chemicals, etc., the reports for consumption optimization show the consumption evolution, cost distribution and correlation with production. The Reports provided by ABB Ability™ zenon include OEEs (Overall Equipment Effectiveness) and alarm reporting. Alternatively, the report templates' design can be customized for content and layout. With the ABB Ability™ zenon Analyzer, you create customized reports quickly and easily, and integrate company specific KPIs or other information according to your needs. Both, report generation and archiving can be configured to be carried out automatically. Each and every report is based on high-quality data combined with the right metadata. By dynamically optimizing the production significant savings in costs and resources can be achieved, supply and demand are closely matched.

Benefits:

- Complete data transparency across the entire production improves your processes by increasing production effectiveness
- Eliminating bottlenecks in production
- Dynamic reports, customized to meet your needs with both default and company-specific KPIs
- Eliminating waste by optimizing energy and material consumption enables up-to-date benchmarks with historical production data
- Supports daily activity of production teams with reports focused on production entities (batch, articles, shifts, etc.)
- Easy integration of new equipment
- Increasing return on investment

Analyzer Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053237R1200	ZRE12-SRV	Report Engine Server
1SAS053230R1200	ZRE12-CLI-1	Report Engine, 1 Client
1SAS053232R1200	ZRE12-CLI-3	Report Engine, 3 Clients
1SAS053233R1200	ZRE12-CLI-5	Report Engine, 5 Clients
1SAS053231R1200	ZRE12-CLI-10	Report Engine, 10 Clients
1SAS053404R1200	ZRE12-CLI-15	Report Engine, 15 Clients
1SAS053405R1200	ZRE12-CLI-25	Report Engine, 25 Clients
1SAS053409R1200	ZRE12-CLI-50	Report Engine, 50 Clients
1SAS053403R1200	ZRE12-CLI-100	Report Engine, 100 Clients
1SAS053238R1200	ZRE12-ENG-DC-16384	Report Engine Data Concentrator 16384 Tags
1SAS053239R1200	ZRE12-ENG-DC-65536	Report Engine Data Concentrator 65536 Tags
1SAS053202R1200	ZRE12-ENG-DC-UNLMTD	Report Engine Data Concentrator Unlimited Tags

Web Server

Web Server

ABB Ability™ zenon Web Server brings projects on the internet and intranets in their exact form. ABB Ability™ zenon projects are suitable for web client use in their native form. They can be used as web projects – with no need of adaptations to the projects.

All screens, users, password administration, information etc. are available online. The web client has the same look & feel and the same functionality as that of ABB Ability™ zenon Runtime. If a project changes (e.g. a new screen), the project is synchronized online on the web client. This means all stakeholders worldwide are always up-to-date. ABB Ability™ zenon Web Server is available in three models: as ABB Ability™ zenon Web Server with monitoring functionality only, as ABB Ability™ zenon Web Server Pro with full operating and monitoring functionality, and a version with limited functionality that allows a maximum of 3 clients.

Web Server Features

Feature	SSRV P LIGHT	SSRV	SSRV P
Runtime connection	•	•	•
Runtime screen features limited			
Runtime screen features full	•	•	•
HTML5 Web Engine		•	•
HTTP tunneling		•	•
Redundancy		•	•
Routing		•	•
Support for MS IE	•	•	•
Support for MS IE, MS EDGE, Mozilla Firefox, Apple Safari, Google Chrome		•	•
Secure web communication	•	•	•
Web Read Access to Process Data	•	•	•
Web Write Access to Process Data	•		•

Benefits:

- Supervision and Control through the Web
- The ABB Ability™ zenon Smart Server can reside outside the automation DMZ (Demilitarized Zone*)
- ABB Ability™ zenon projects can be loaded without adaptation
- Simple and quick set-up of all network functionalities

Functionalities:

- All process data in the intranet/internet
- Full process overview from every Windows PC workstation with different web browsers
- Support for Internet Explorer 8+

- Web client starter (allows ABB Ability™ zenon web client to be started from any desired browser)
- No additional project configuration required
- Screens are displayed 1:1. No need to adjust
- Changes to the project are recognized and updated online
- Compatible with Windows Terminal Services, no additional installation on web or thin clients necessary
- Client authentication
- Read access to the project possible
- 128-bit encryption
- Optional HTTP tunneling can be activated
- Routing possible: the web server can be installed on any desired computer in the network
- The ABB Ability™ zenon Web Server can also be executed in redundant operation. This requires two identical installations on two independent PCs.
- Redundancy
- HTML Web Engine: Plug-in free, platform independent HTML5 visualization. For simple dashboards and applications for the observation and operation of processes.
- You can find details in the HTML web engine chapter

Webserver Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053134R1200	ZS12-SSRV-1	Smart Server 1 Client
1SAS053137R1200	ZS12-SSRV-10	Smart Server 10 Clients
1SAS053142R1200	ZS12-SSRV-100	Smart Server 100 Clients
1SAS053138R1200	ZS12-SSRV-15	Smart Server 15 Clients
1SAS053139R1200	ZS12-SSRV-20	Smart Server 20 Clients
1SAS053143R1200	ZS12-SSRV-200	Smart Server 200 Clients
1SAS053140R1200	ZS12-SSRV-25	Smart Server 25 Clients
1SAS053135R1200	ZS12-SSRV-3	Smart Server 3 Clients
1SAS053136R1200	ZS12-SSRV-5	Smart Server 5 Clients
1SAS053141R1200	ZS12-SSRV-50	Smart Server 50 Clients
1SAS053255R1200	ZS12-SSRV-500	Smart Server 500 Clients

Clients:

Web Server Clients are based on “concurrent user connections”. The maximum number of users that can access the Web Server at the same time is defined.

Attention:

Archive revision and main menus are not available on the Web Server.

Web Server Pro

Functionalities:

- All process data on the intranet/internet
- Full process overview from every Windows PC workstation with different web browsers
- Support for Internet Explorer 8+
- Web client starter (allows ABB Ability™ zenon web client to be started from any desired browser)
- No additional project configuration required
- Screens are displayed 1:1. No need to adjust
- Changes to the project are recognized and updated online
- Compatible with Windows Terminal Services, no additional installation on web or thin clients necessary
- Client authentication
- Writing of set values and write access to all Runtime project data of all available modules is possible
- Strong encryption
- Optional HTTP tunneling can be activated
- Routing possible; the web server can be installed on any desired computer in the network

- The ABB Ability™ zenon Web Server can also be executed in redundant operation. This requires two identical installations on two independent PCs.
- Redundancy
- HTML Web Engine:
- Plug-in free, platform independent HTML5 visualization.
- For simple dashboards and simple applications for the observation and operation of processes.

Webserver Pro Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053145R1200	ZS12-SSRV-PRO-1	Smart Server Pro 1 Client
1SAS053146R1200	ZS12-SSRV-PRO-3	Smart Server Pro 3 Clients
1SAS053147R1200	ZS12-SSRV-PRO-5	Smart Server Pro 5 Clients
1SAS053148R1200	ZS12-SSRV-PRO-10	Smart Server Pro 10 Clients
1SAS053149R1200	ZS12-SSRV-PRO-15	Smart Server Pro 15 Clients
1SAS053150R1200	ZS12-SSRV-PRO-20	Smart Server Pro 20 Clients
1SAS053151R1200	ZS12-SSRV-PRO-25	Smart Server Pro 25 Clients
1SAS053407R1200	ZS12-SSRV-PRO-30	Smart Server Pro 30 Clients
1SAS053152R1200	ZS12-SSRV-PRO-50	Smart Server Pro 50 Clients
1SAS053153R1200	ZS12-SSRV-PRO-100	Smart Server Pro 100 Clients
1SAS053154R1200	ZS12-SSRV-PRO-200	Smart Server Pro 200 Clients
1SAS053256R1200	ZS12-SSRV-PRO-500	Smart Server Pro 500 Clients

Web Server Pro Light

Clients:

Web Server Clients are based on “concurrent user connections”. The simultaneous access to the Web Server has a set maximum number of users.

Attention:

Archive revision and main menus are not available on the Web Server.

Additional information:

Web Server: read access to the project possible. Web Server Pro: writing of set values and write access to all Runtime project data of all available modules is possible.

Web Server Pro Light: writing of set values and write access to all Runtime project data of all available modules is possible. Clients: Web Server Clients are based on “concurrent user connections”.

Webserver Pro Light Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053144R1200	ZS12-SSRV-PRO-3-LIGHT	Smart Server Pro Light 3 Clients
1SAS053209R1200	ZS12-SSRV-PRO-5-LIGHT	Smart Server Pro Light 5 Clients

Energy



ABB Ability™ zenon Energy is a software for the automation and control of low and medium voltage distribution, renewable power generation, storage, public transportation and infrastructure.

Energy Server

International system integrators use ABB Ability™ zenon Energy as a reliable and open platform, with special features for the Energy Industry that saves valuable project configuration time. For both large and small power companies, ABB Ability™ zenon Energy delivers outstanding automation control, performance, stability and scalability.

The ABB Ability™ zenon Energy is tailored to the needs of electricity production, transfer and distribution.

Delivery includes:
Runtime with direct connection to hardware (e.g. IEDs)

The Energy Server license contains:

- Alarm Areas
- Interlocking
- Command Processing
- Programming Interface VBA/C#/VB.NET
- Automatic Line Coloring (ZS12-ALC incl. Transformer)
- Historian with SQL Export (ZS12-ARCHEXP)
- Extended Trend (ZS12-ETM)
- Recipegroup Manager (ZS12-RGM)
- Reporting (read-only access)
- Logic Runtime (same tag amount as Energy Server)

Included Drivers:

- IEC 60870-5-101/-104 driver (ZS12-DRV-IEC870)
- IEC 60870-5-103 driver (ZS12-DRV-IEC870-103)
- DNP3 NG driver (ZS12-DRV-DNP3_TG)
- IEC 61850 driver (ZS12-DRV-IEC61850)
- IEC 61400-25 driver (ZS12-DRV-IEC61400-25-4-C)
- IEC 62056-21 driver (ZS12-DRV-IEC62056)
- Modbus Energy driver (ZS12-DRV-MODBUS_E)

The tag limitation is oriented on external connections. Internal calculations are not counted for the license scale.

- Included Logic Drivers:**
- IEC 61850 Client (ST-850CI)
 - IEC 61850 Server + GOOSE (ST-850SeGo)
 - IEC 60870 Master (ST-870M101104)
 - IEC 60870 Slave (ST-870S101104)
- Options:**
- Development Environment (ZEE12-ED, ZEE12-ED-SA)
 - Load Management (ZS12-EMS)
 - Process Recorder (ZS12-PR)
 - Process Gateways (ZGW-XY)
 - Reporting (write access) (ZS12-REPORT)
 - Message Control (ZS12-MC)
 - Command Sequencer (ZS12-CS)
 - Process Recorder (ZS12-PR)
 - Everywhere Server (ZS12-EVWH)
 - Historian SQL Server Interface (ZSQLSRV)
 - GIS Editor and Control (ZS12-GIS)
 - PLC and bus driver – see “Drivers”

Energy Server Licenses		
ABB Order ID	ABB ID	PRODUCT
1SAS050071R1200	ZEE12-SRV-750E	Energy Server 750 Tags embedded
1SAS050067R1200	ZEE12-SRV-1500	Energy Server 1500 Tags
1SAS050068R1200	ZEE12-SRV-4500	Energy Server 4500 Tags
1SAS050069R1200	ZEE12-SRV-7000	Energy Server 7000 Tags
1SAS050070R1200	ZEE12-SRV-UNLMTD	Energy Server Unlimited Tags

Energy Client

Delivery includes:
Runtime without direct connection to hardware (e.g. IEDs)

- The Energy Client contains:**
- Alarm Areas
 - Interlocking
 - Command Processing
 - Programming Interface VBA/C#/VB.NET
 - Automatic Line Coloring (ZS12-ALC incl. Trans-former)
 - Historian with SQL Export (ZS12-ARCHEXP)
 - Extended Trend (ZS12-ETM)
 - Recipegroup Manager (ZS12-RGM)
 - Reporting (read-only access)

The tag limitation is oriented to external connections of the server. Internal calculations are not counted for the license scale.

If the Energy Client is used in combination with an integration project, up to 64 tags are possible as a direct connection to hardware.

- Options:**
- Process Gateways (ZGW-XY)
 - ABB Ability™ zenon Logic
 - Reporting Write Access (ZS12-REPORT)

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Energy Client Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS050072R1200	ZEE12-CLI-1500	Energy Client 1500 Tags
1SAS050073R1200	ZEE12-CLI-4500	Energy Client 4500 Tags
1SAS050074R1200	ZEE12-CLI-7000	Energy Client 7000 Tags
1SAS050075R1200	ZEE12-CLI-UNLMTD	Energy Client Unlimited Tags

Energy Editor

Energy Editor for Server or Client
Delivery includes:
Environmental development for the creation and maintenance of ABB Ability™ zenon projects. All modules of a licensed Energy Server or Energy Client are included. .

License:
Energy Editor running on the same computer as the Server or Client.

Energy Editor Standalone
Delivery includes:
Environmental development for the creation and maintaining ABB Ability™ zenon projects. All modules of a licensed Energy Server or Energy EE Client are included.

License:
Energy Editor Standalone runs on a separate computer.

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Energy Editor Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS050077R1200	ZEE12-ED	Energy Editor Option
1SAS050078R1200	ZEE12-ED-SA	Energy Editor Standalone version
1SAS050106R1200	ZEE12-DV	Energy Engineering Studio
1SAS050134R1200	ZEE12-DV-COMP	Energy Engineering Studio Complete
1SAS050112R1200	ZEE12-E&T	Energy Education & Training

Delivery includes:
Energy Editor with Energy Server

- The following items are included:**
- Energy Server, unlimited tags (ZEE12-SRV-UNLMTD)
 - Energy Editor (ZEE12-ED)
 - Reporting (Report Generator/Report Viewer) (ZS12-REPORT)
 - Message Control (ZS12-MC)
 - Industrial Performance Analyzer (ZS12-IPA)
 - PLC Diagnosis (ZS12-PLC-DIAG)
 - Industrial Maintenance Manager (ZS12-IMM)
 - Gateways, (OPC/OPC UA Server, Modbus Slave, SNMP, SQL, DEC, DNP3, IEC60870, ICCP/Tase.2, Azure Gateway)
 - Logic Workbench Pro (IEC 61131-3)
 - Logic Runtime unlimited (ZSE12-LO-UNLMTD)
 - Historian SQL Server Interface (ZSQLSRV)
 - Load Management (ZS12-EMS)
 - 3D Integration (ZS12-3D)
 - GIS Editor and Control (ZS12-GIS)
 - Command Sequencer (ZS12-CS)
 - Process Recorder (ZS12-PR)
 - Everywhere Server (ZS12-EVWH)
 - All PLC and bus drivers – see “Drivers”

Energy Process Gateways

The Process Gateway serves as an interface to higher-level systems. Numerous interfaces and protocols are available for unidirectional as well as bidirectional data exchange.

Modbus Slave

Bidirectional communication with Modbus masters. The Process Gateway acts as a Modbus-compatible PLC in the process. Modbus RTU is used as a protocol for serial connections and Open Modbus TCP is used for Ethernet connections.

OPC UA Server

- Bidirectional communication to OPC UA clients. The following are supported:
- Data access to connect ABB Ability™ zenon process variables
 - Alarms & Conditions for read access to ABB Ability™ zenon Alarms
 - Historical data access for read access to the Historian
 - History read for alarms and CEL events

DNP3 Slave/Outstation

Bidirectional communication with DNP3 masters. The Process Gateway acts as a DNP3-compatible PLC or RTU in the process.

SNMP Server/Agent

The SNMP Server allows for the integration of the control system into the Network Management Systems (NMS) running in a company. This makes it possible to evaluate, display and control parts of the process image of the process control system in a NMS.

IEC 60870 Slave

Bidirectional communication with IEC-60870 masters. Here, the Process Gateway acts as an IEC 60870 101/104-compatible PLC.

ICCP/TASE.2/IEC 60870-6 Connection

Communication interface for the Inter-Control Center Communication protocol. The ICCP/TASE.2 Process Gateway acts as a server for the establishment of the connection. It in fact does not establish the connection autonomously but waits for the initial set-up steps from the client. Once the connection is ready the ICCP/TASE.2 process Gateway sends data as a server and receives data as a client.

Azure Gateway

Unidirectional communication (writing) of online values from ABB Ability™ zenon Runtime to any desired Microsoft Azure Service Bus queue.

Syslog Gateway

Sends alarms and/or CEL entries from Runtime as a syslog message to a definable syslog server.

Energy Process Gateway Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053092R1200	ZS12-GW-AZU	Process Gateway – MS Azure
1SAS053088R1200	ZS12-GW-DNP3	Process Gateway – DNP3 Server
1SAS053090R1200	ZS12-GW-ICCP	Process Gateway – ICCP/TASE.2/IEC 60870-6
1SAS053091R1200	ZS12-GW-IEC60870SL	Process Gateway – IEC60870 Slave
1SAS053085R1200	ZS12-GW-Modbus	Process Gateway – Modbus Slave
1SAS053084R1200	ZS12-GW-OPCUA	Process Gateway – OPC UA Server
1SAS053087R1200	ZS12-GW-SNMP	Process Gateway – DNP3 Slave
1SAS053271R1200	ZS12-GW-SYSLOG	Process Gateway – Syslog Client

Energy Client Logic

Standalone soft PLC or extended SCADA logic tag support for Windows-based (I)PC systems. With the integration of the IEC 61131-3 programming environment with ABB Ability™ zenon, you can create PLC and SCADA projects in one environment.

Delivery includes:

- Real time soft PLC for deterministic program execution of IEC 61131-3 programs.
- All I/O drivers for the PC in price group “T” are supplied with the ABB Ability™ zenon Logic Runtime (see driver list). See the product documentation for restrictions during the operation of real time soft PLC or SCADA logic.
- Networked ABB Ability™ zenon Logic systems via TCP/IP network (binding)
- ABB Ability™ zenon Logic Monitoring Builder & Monitoring Viewer included

Option:

- Logic communication options, (see Logic communication options)

Attention:

This license requires an existing Energy Server or Energy Client license or can only be ordered in combination with an Energy Server or Energy Client license.

Realtime system not supported in virtual machines.

Energy Client Logic License

ABB Order ID	ABB ID	PRODUCT
1SAS053103R1200	ZS12-LO-UNLMTD	Logic Runtime Unlimited Tags

Energy Client Logic Drivers

IEC 61850 Client for Logic

ABB Ability™ zenon Logic IEC 61850 client driver. The driver supports the following functions:

- Browse the data model (logical devices, logical nodes, data objects and data attributes)
- Read and write Data values
- Read and write Data Set values
- Dynamically create and delete Data Sets
- Control Model (all models)
- Reporting (buffered and unbuffered)
- File transfer

IEC 61850 Server for Logic

ABB Ability™ zenon Logic IEC 61850 Server driver. The driver supports the following IEC 61850 features:

- Multiple connections through IEC 61850 clients via TCP/IP
- Browse the data model (logical devices, logical nodes, data objects and data attributes)
- Read and write Data values
- Read and write Data Set values
- Dynamically create and delete Data Sets
- Control Model (all models)
- Reporting (buffered and unbuffered)
- File transfer
- GOOSE Publisher & Subscriber

IEC 60870-5-101/104 Slave for Logic

ABB Ability™ zenon Logic Slave driver for communication with an IEC 60870-5-101 or IEC 60870-5-104 Master.

IEC 60870-5-101/104 Master for Logic

ABB Ability™ zenon Logic Master driver for communication with an IEC 60870-5-101 or IEC 60870-5-104 Slave.

DNP3 Slave/Outstation

ABB Ability™ zenon Logic Outstation driver for communication with a DNP3 Master.

DNP3 Master

ABB Ability™ zenon Logic Master driver for communication with a DNP3 Master.

IEEE C37.118 Client

Driver for IEEE C37.118 Synchrophasor communication with PMUs and PDCs.

IEEE 61850-90-5 Client

Driver for IEC 61850-90-5 Synchrophasor communication with PMUs and PDCs. Supports Routable Sampled Values. Connection possible to GE Multi-lin N60 and L90.

Energy Client Logic Driver Licenses

ABB Order ID	ABB ID	PRODUCT
included	ZS12-LODRV-BNMSTPS	Logic BACnet MSTP Server RS485 Driver
included	ZS12-LODRV-DLMS	Logic DLMS Device Language Message Specification/ COSEM Companion Specification for Energy Metering Driver
1SAS053252R1200	ZS12-LODRV-DNP3M	Logic DNP3 Master Driver
1SAS053186R1200	ZS12-LODRV-DNP3S	Logic DNP3 Slave/ Outstation Driver
1SAS053184R1200	ZS12-LODRV-870M101104	Logic IEC 60870-5-101/104 Master Driver
1SAS053185R1200	ZS12-LODRV-870S101104	Logic IEC 60870-5-101/104 Slave Driver
1SAS053182R1200	ZS12-LODRV-850CI	Logic IEC 61850 Client Driver
1SAS053183R1200	ZS12-LODRV-850SeGo	Logic IEC 61850 Server Driver
1SAS053254R1200	ZS12-LODRV-IEC850905CI	Logic IEC 61850-90-5 Client Driver
included	ZS12-LODRV-62056_K5Bus	Logic IEC 62056 Driver
included	ZS12-LODRV-IEEEC37118CI	Logic IEEE C37.118 Client Driver

Distribution Management



ABB Ability™ zenon Distribution Management offers monitoring, control, maintenance and optimization for utility networks, such as low and medium voltage electrical grids, water and wastewater or gas supply networks, from local, and regional control centers within one integrated platform.

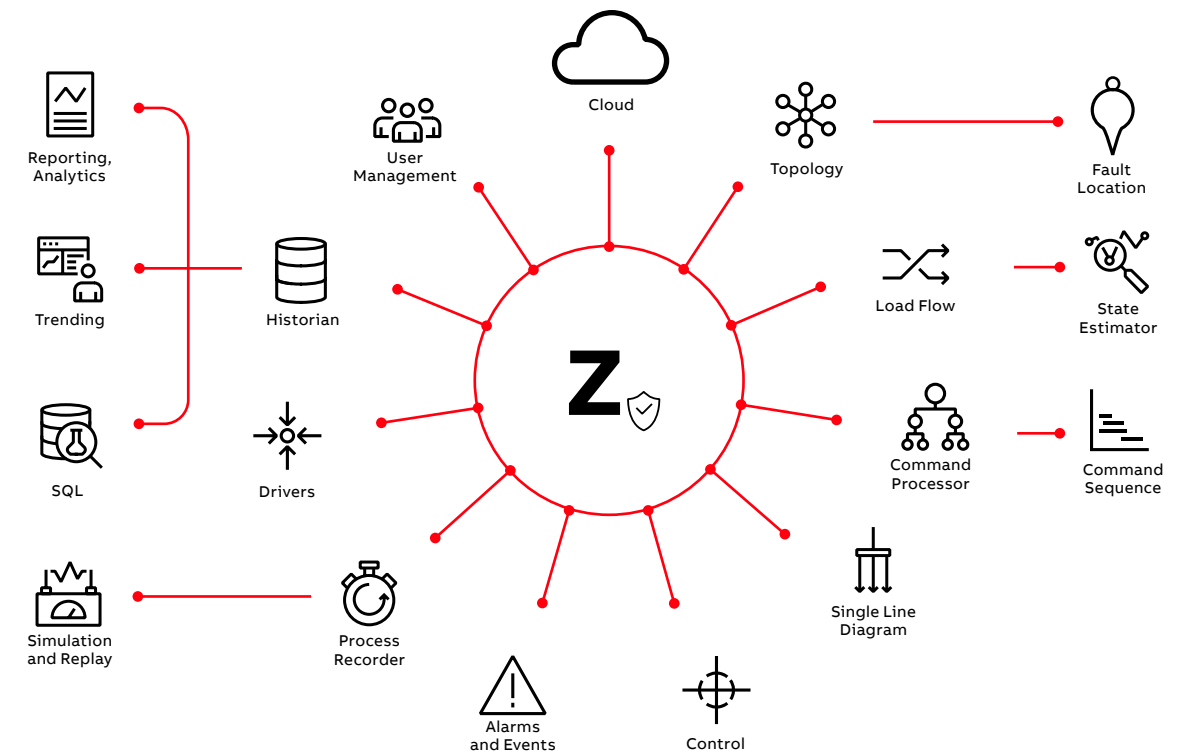
ABB Ability™ zenon Distribution Management, in extension to ABB Ability™ zenon Energy, integrates Distributed Energy Resources (DER), such as Renewables, Battery Energy Storage, EV Charging, and other prosumers to form and operate a smart grid.

From configuring a project, through visualization, to reporting and legally-compliant archiving, ABB Ability™ zenon Distribution Management offers a wide range of applications that make your operations secure, stable and efficient.

ABB Ability™ zenon Distribution Management can interconnect with any type of public supply infrastructure assets in green field and brown field applications.

ABB Ability™ zenon Distribution Management can act as an Infrastructure Asset Monitor, for detailed visualization and reporting of equipment conditions.

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Distribution
Management



Distribution Management Server

Topology

The optional Topology module includes all the functionality of Automatic Line Coloring (ALC) and also:

- The procedural elements Generator and Disconnecter
- Topology check: voltage to ground-interlocking and disconnecter under load-interlocking, etc.
- Ground fault location (impedance based)
- Ground fault location.

Has to be licensed on the Server/Standby and ABB Ability™ zenon Development. The module automatically licenses each connected client.

Process Recorder

With the optional Process Recorder module, processes that have already happened can be played back in process screens. To do this, the Process Recorder records data in its own archive system. This data is then transferred in the simulation mode and fed into the process screens. Navigation bars can be used to skip forwards or backwards in time, or the screen is played back like a video.

Has to be licensed on the Server, Standby and ABB Ability™ zenon Development. The module automatically licenses each connected client. This module automatically activates the Project Simulation module.

Command Sequencer

With the optional Command Sequencer module, the user can create, change and teach stacked programs of switching commands in Runtime and execute these with the click of a mouse. Has to be licensed on the Server, Standby and ABB Ability™ zenon Editor. The module automatically licenses each connected client. This module automatically activates the Project Simulation module.

Load Flow Calculation

The load flow calculation provides information on load distribution over a mesh network. To do this, the measured points of all generators and all loads are used. The load and distribution to the equipment parts in between is calculated. Load flow can be displayed to increase safety when executing switching commands: the load flow calculation provides advance information to prevent a possible overload of equipment parts (lines, cables or transformers).

Has to be licensed on the Server/Standby and ABB Ability™ zenon Editor. The module automatically licenses each connected client.

State Estimator

The State Estimator calculates the distribution of the load flow over a mesh network using any desired measured points in the network. A mathematical approximation method of the nonmeasured parts of the network is used to determine voltage, current, phase angle, active and reactive power. Firstly, load flows of nonmeasured parts of the network can be displayed.

Secondly, it is possible to increase safety in the execution of switching commands, by providing information about switching actions in advance. A possible overload of the equipment parts (lines, cables or transformers) is predicted.

Has to be licensed on the Server/Standby and ABB Ability™ zenon Editor. The module automatically licenses each connected client.

Energy Module Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS053410R1200	ZS12-CIMCGMES	Common Grid Model Exchange Standard Export Interface
1SAS053200R0820	ZS12-CS	Command Sequencer
Only available in DMS	ZS12-LFC-DMS	Load Flow Calculation
1SAS053203R0820	ZS12-PR	Process Recorder
Only available in DMS	ZS12-SE-DMS	State Estimator
Only available in DMS	ZS12-TOP-DMS	Topology

License includes:

- 2x ZEE12-SRV-100K/UNLMTD
- All modules of the Energy Server
- Topology (ZS12-TOP-DMS)
- Process Recorder (ZS12-PR)
- Command Sequencer (ZS12-CS)
- Loadflow Calculation (ZS12-LFC-DMS)
- State Estimator (ZS12-SE-DMS)
- GIS Editor (ZS12-GIS)
- Historian SQL Server Interface (ZSQLSRV)
- Load Management (ZS12-EMS)
- Reporting (ZS12-REPORT)
- IEC 60870-5-101/-104 driver (ZS12-DRV-IEC870)
- IEC 60870-5-103 driver (ZS12-DRV-IEC870-103)
- DNP3 NG driver (ZS12-DRV-DNP3_TG)
- IEC 61850 driver (ZS12-DRV-IEC61850)
- IEC 61400-25 driver (ZS12-DRV-IEC61400-25-4-C)
- IEC 62056-21 driver (ZS12-DRV-IEC62056)
- Modbus Energy driver (ZS12-DRV-MODBUS_E)

Options:

- Development environment (ZEE12-ED, ZEE12-ED-SA)
- Process Gateways (ZGW-XY)
- Message Control (ZS12-MC)
- Energy Communication Options
- PLC and Bus Drivers (see “Drivers” on page 25)

Distribution Management Server Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS050130R1200	ZDMS12-SRV-50K	Distribution Management Server 50000 Tags
1SAS050088R1200	ZDMS12-SRV-100K	Distribution Management Server 100000 Tags
1SAS050090R1200	ZDMS12-SRV-UNLMTD	Distribution Management Server Unlimited Tags

Framework conditions for supply:

- The included servers are dedicated servers: only one screen can be displayed. For full operation, an upgrade to a full workstation is necessary (ZDMS12-SRV-100k for example).
- DMS Server Package only available in combination with at least one DMS client license (ZDMS12-CLI-UNLMTD).
- Additional modules must be licensed twice if they are used on both servers.

Included ABB Ability™ zenon Logic drivers:

- IEC 61850 Client (ST-850CI)
- IEC 61850 Server + GOOSE (ST-850SeGo)
- IEC 60870 Master (ST-870M101104)
- IEC 60870 Slave (ST-870S101104)

Distribution Management Client

Delivery includes:

- Runtime WITHOUT direct connection to hardware (e.g. IEDs)

Distribution Manage Client contains:

- Alarm Areas
- Interlocking
- Command Processing
- Programming Interface VBA/C#/VB.NET
- Automatic Line Coloring (ZS12-ALC incl. Transformer)
- Historian with SQL Export (ZS12-ARCHEXP)
- Extended Trend (ZS12-ETM)
- Recipegroup Manager (ZS12-RGM)
- Reporting (read only access)

The tag limit is based on the servers' external connections. Internal calculations are not counted for the license scale. If the DMS client is used in combination with an integration project, up to 64 tags are possible as a direct connection to hardware.

Options:

- Development environment (ZEE12-ED, ZEE12-ED-SA)
- ABB Ability™ zenon Logic Runtime unlimited (ZSE12-LO-UNLMTD)
- Process Gateways (ZGW-XY)
- Reporting (Write Access) (ZS12-REPORT)

Distribution Management Client Licenses

ABB Order ID	ABB ID	PRODUCT
1SAS050086R1200	ZDMS12-CLI-UNLMTD	Distribution Management Client Unlimited Tags

Distribution Management Development

Delivery includes:

Distribution Management Editor with Distribution Management Server

The following items are included:

- Energy Server unlimited tags (ZEE12-SRV- UNLMTD)
- Energy Editor (ZEED8)
- Reporting (Report Generator/Report Viewer) (ZS12-REPORT)
- Message Control (ZS12-MC)
- Industrial Performance Analyzer (ZS12-IPA)
- PLC Diagnosis (ZS12-PLC-DIAG)
- Industrial Maintenance Manager (ZS12-IMM)
- Gateways, (OPC/OPC UA Server, Modbus Slave, SNMP SQL, DEC, DNP3, IEC60870, ICCP/Tase.2, Azure Gateway) (ZGW-XX)
- Logic Workbench Pro (IEC 61131-3)
- Logic Runtime unlimited (ZSE12-LO-UNLMTD)
- Historian SQL Server Interface (ZSQLSRV)
- Load Management (ZS12-EMS)
- 3D Integration (ZS12-3D)

- GIS Editor and Control (ZS12-GIS)
- Command Sequencer (ZS12-CS)
- Process Recorder (ZS12-PR)
- Everywhere Server – Smartphone Integration (ZS12-EVWH)
- Topology DMS (ZS12-TOP-DMS)
- Loadflow Calculation (ZS12-LFC-DMS)
- State Estimator (ZS12-SE-DMS)
- SAP Interface (ZS12-SAP)
- Production & Facility Scheduler (ZS12-PFS)
- All PLC and bus drivers (see “Drivers” on page 25)

Distribution Management Editor License

ABB Order ID	ABB ID	PRODUCT
1SAS050132R1200	ZDMS12-DEV	Distribution Management Development Environment
1SAS050133R1200	ZDMS12-E&T	Distribution Management for Education & Training

Developer Network



Join our ABB Ability™ zenon Developer Network and become an active part of our ABB Ability™ zenon community. Benefit from the trainings, support and knowledge sharing provided within the membership to get your projects executed in time, cost and premium quality.

ABB Ability™ zenon
Developer Network
Membership

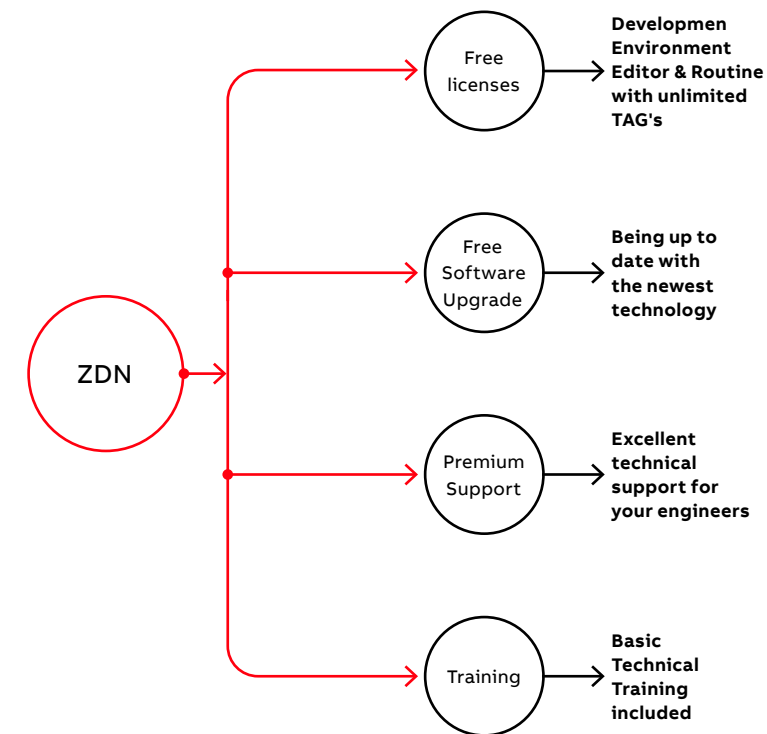
The ABB Ability™ zenon Developer Network (ZDN) membership is a special offering for system integrators, machine builders and OEMs.

When joining the ABB Ability™ zenon Developer Network, you are invited for the ABB Ability™ zenon Basic Technical Trainings on <https://mylearning.abb.com/>.

For a smooth ramp-up of ABB Ability™ zenon in your organization, premium support and further trainings are offered.

Fully licensed development environment with unlimited TAGs and a selectable variety of extensions of all available versions of ABB Ability™ zenon are at disposal.

As the following illustration shows, this package consists of a low initial investment and a simple annual fee, which includes the development licenses, premium support and free software upgrades.



Investment overview

There are four different memberships, depending on the extensions required:

- Developer Network Standard (ZDN-ZDV)
- Developer Network Suite (ZDN-SUITE)
- Developer Network Energy (ZDN-EE)
- Developer Network Distribution Management (ZDN-DMS)

The modules included in the individual memberships are listed on the following pages.

The ZDN is limited to be used for engineering and demonstration purposes only.

The ZDN membership is always valid from January 1 to December 31.

ABB Ability™ zenon Developer Network Features

Feature	licensed on	ABB ID	ZDN ZDV	ZDN SUITE	ZDN EE	ZDN ZDMS
Basic						
Hardware binding						
Fixed project delivery						
No. of licenses			•	•	•	•
Operation			•	•	•	•
Development			•	•	•	•
Networking						
Can act as Server			•	•	•	•
Can act as Client			•	•	•	•
Distributed engineering			•	•	•	•
Redundancy			•	•	•	•
Redundancy (circular)			•	•	•	•
Multiprojecthierarchy			•	•	•	•
Features and Modules						
3D Integration	DEV	ZS12-3D	•	•	•	•
Alarm areas			•	•	•	•
Alarm handling			•	•	•	•
Automatic Line Coloring	DEV, SRV, CL	ZS12-ALC	•	•	•	•
Historian with SQL Export	DEV, SRV	ZS12-ARCHEXP	•	•	•	•
Batch Control Starter Edition	DEV, SRV	ZS12-BASE	•	•		
Batch Control Professional Edition	DEV,SRV	ZS12-BAPRO		•		
Command processing					•	•
Command sequencer	DEV, SRV	ZS12-CS			•	•
Development Option on Server	SRV	ZEE12-ED				
Development Option standalone	SRV	ZEE12-ED-SA				
Event handling			•	•	•	•
Everywhere Server	SRV	ZS12-EVWH	•	•	•	•
Extended Trend Monitoring	DEV, SRV, CL	ZS12-ETM	•	•	•	•
Extended Trend and Historian Starter Edition	DEV, SRV, CL	ZS12-ARVETM-SE	•	•	•	•
GIS Editor and Control	DEV, SRV	ZS12-GIS	•	•	•	•
Historian SQL Server Interface	DEV, SRV	ZS12-ZSQLSRV	•	•	•	•
HTML window/embedded browser			•	•	•	•
Interlocking			•	•	•	•
Language switch			•	•	•	•
Load Flow Calculation	DEV, SRV, CL	ZS12-LFC-DMS				•
Load Management	DEV, SRV	ZS12-EMS	•	•	•	•
Industrial Maintenance Manager	DEV, SRV, CL	ZS12-IMM	•	•	•	•
Message Control	DEV, SRV	ZS12-MC	•	•	•	•
Multi touch support			•	•	•	•
Online reload			•	•	•	•
PLC diagnosis for S7 Simatic Graph	DEV, SRV, CL	ZS12-PLC-DIAG	•	•	•	•
Process Recorder	DEV, SRV	ZS12-PR	•	•	•	•
Production Facility Scheduler	DEV, SRV, CL	ZS12-PFS		•		•
Programming Interface (VBA/VSTA)			•	•	•	•
Programming Interface (C#/VB.NET)			•	•	•	•
Recipes (std)			•	•	•	•
Recipe group manager	DEV, SRV, CL	ZS12-RGM	•	•	•	•
Report Generator	DEV, SRV, CL	ZS12-REPORT	•	•	•	•
Report Viewer			•	•	•	•
SAP Interface	DEV, SRV	ZS12-SAP		•		•
Scheduler			•	•	•	•
Shift Management			•	•	•	•
State Estimator	DEV, SRV	ZS12-SE-DMS				•
Topology	DEV, SRV	ZS12-TOP-DMS				•
Video integration			•	•	•	•
Versions – old ones included			•	•	•	•
Worldview (mouse or touch)			•	•	•	•
WPF support			•	•	•	•
Standard drivers						
3964R-RK512 driver		ZS12-DRV-3964R32	•	•	•	•
3S v3 driver for PLC Handler		ZS12-DRV-3S_V3	•	•	•	•
ABB 07KT94 driver		ZS12-DRV-CS3132	•	•	•	•
ABB AC500 driver		ZS12-DRV-AC500	•	•	•	•
ABB Drives PHLOEM driver		ZS12-DRV-PHLOEM	•	•	•	•
Allen-Bradley DF1-driver		ZS12-DRV-ALLENDF1	•	•	•	•
Allen-Bradley ODVA driver		ZS12-DRV-LOGIX_ODVA	•	•	•	•
Allen-Bradley RS – Linx driver		ZS12-DRV-ALLENBNT	•	•	•	•
Archive driver (RAW)		ZS12-DRV-ARCHDRV	•	•	•	•
Asfinag – SaRS SOS-telephones		ZS12-DRV-SARS	•	•	•	•

ABB Ability™ zenon Developer Network Features

Feature	licensed on	ABB ID	ZDN ZDV	ZDN SUITE	ZDN EE	ZDN ZDMS
B&R – BR TCP-IP driver		ZS12-DRV-BURTCP	•	•	•	•
B&R – BR-PVI based driver		ZS12-DRV-BURPVI	•	•	•	•
B&R – BR-PVI driver (replaced)		ZS12-DRV-BUR20032	•	•	•	•
B&R – Transponder Reader 4102 /4150		ZS12-DRV-BuR41xx32	•	•	•	•
Bachmann M1 driver		ZS12-DRV-BACH	•	•	•	•
BACnet driver NG		ZS12-DRV-BACNETNG	•	•	•	•
Beckhoff BC-BK 9000		ZS12-DRV-BECKH9000	•	•	•	•
Biffi-Tyco Flow Control – DCM		ZS12-DRV-BIFFIDCM	•	•	•	•
Brodersen – System 2000 driver		ZS12-DRV-SYS2000	•	•	•	•
Brodersen – System 2000 logging		ZS12-DRV-SYSLOG	•	•	•	•
Buderus – Buderus32 driver		ZS12-DRV-BUDERUS	•	•	•	•
Codesys ArtIng SoftPLC driver		ZS12-DRV-3S_ARTI_NG	•	•	•	•
CP001 Gateway driver		ZS12-DRV-CP001	•	•	•	•
CTI driver		ZS12-DRV-CTI	•	•	•	•
Driver for Esser BMZ 8000		ZS12-DRV-ESSER32	•	•	•	•
EIB/KNX driver		ZS12-DRV-EIBV2_32	•	•	•	•
ESA – Driver for ESA PCI CIB		ZS12-DRV-ESA32	•	•	•	•
Euchner – Ident System driver		ZS12-DRV-EUCH	•	•	•	•
Festo – EasyIP Multiprog driver		ZS12-DRV-FEASYIP	•	•	•	•
Festo – Serial-CI driver, FST		ZS12-DRV-FEFRC	•	•	•	•
File driver		ZS12-DRV-DATEI32	•	•	•	•
GE SRTP driver		ZS12-DRV-GE_SRTP	•	•	•	•
Generic driver for CAN bus		ZS12-DRV-CAN	•	•	•	•
Hilscher CIF driver		ZS12-DRV-CIF32	•	•	•	•
Hilscher MPI driver		ZS12-DRV-OPENMPI	•	•	•	•
Hitachi – Hitachi driver		ZS12-DRV-HITA	•	•	•	•
Hydrometer – Hydrometer Driver		ZS12-DRV-Hydrometer	•	•	•	•
IBH – Driver for IBH Soft PLC		ZS12-DRV-IBHRTSPS	•	•	•	•
Idec – Idec driver		ZS12-DRV-IDEC	•	•	•	•
i-LON 100 driver		ZS12-DRV-LON100	•	•	•	•
Integra driver		ZS12-DRV-INTEGRA	•	•	•	•
Interbus S driver		ZS12-DRV-INTERNT	•	•	•	•
Jetter – Jetter Treiber		ZS12-DRV-JETTER	•	•	•	•
Kaba – data point server driver		ZS12-DRV-KabaDPServer	•	•	•	•
Keba – Driver for buttons /Ketop		ZS12-DRV-KETOP	•	•	•	•
KEPCO – Kepco KDNP1 driver		ZS12-DRV-KDNP1	•	•	•	•
Koyo – KOYO Sequence driver		ZS12-DRV-KOYO	•	•	•	•
LON driver		ZS12-DRV-LON32	•	•	•	•
LSIS – LS Industrial Systems-XGT		ZS12-DRV-LS_XGT	•	•	•	•
Mastervolt – MasterBus driver		ZS12-DRV-Masterbus	•	•	•	•
Matsushita – TCP-IP drv.		ZS12-DRV-MATSUTCP	•	•	•	•
M-Bus – Standard M-Bus driver		ZS12-DRV-MBUS32	•	•	•	•
Metrawatt driver		ZS12-DRV-Metrawatt	•	•	•	•
Microsoft – Azure driver		ZS12-DRV-AzureDrv	•	•	•	•
Mininet-Master driver		ZS12-DRV-MINI32	•	•	•	•
Mitsubishi – Melsec A-Q driver		ZS12-DRV-MITSUB	•	•	•	•
Mitsubishi – Melsec FX driver		ZS12-DRV-MITFX	•	•	•	•
Modbus RTU / Open Modbus TCP drv.		ZS12-DRV-MODRTU32	•	•	•	•
Modicon TSX Micro driver		ZS12-DRV-MODICON	•	•	•	•
Moeller Electric PSUNI driver		ZS12-DRV-PSUNI32	•	•	•	•
NMEA 2000 Bus driver		ZS12-DRV-NMEA2000	•	•	•	•
Omron – OMRON driver		ZS12-DRV-OMRON32	•	•	•	•
Omron – Omron FINS driver		ZS12-DRV-OMRONFINS	•	•	•	•
OPC Client V2-0 driver		ZS12-DRV-OPCCLI32	•	•	•	•
OPC UA Client driver		ZS12-DRV-OPCUA	•	•	•	•
OSAI – OSAI TCP/IP driver		ZS12-DRV-OSAI	•	•	•	•
Otis – Driver for Otis controller		ZS12-DRV-OTIS	•	•	•	•
Panasonic serial driver		ZS12-DRV-MATSU32	•	•	•	•
Passive Modbus RTU driver		ZS12-DRV-MODLISTEN	•	•	•	•
PC Adapter – VipaGreenCable		ZS12-DRV-S7PCADAPTER	•	•	•	•
PCS807 Profibus DP driver		ZS12-DRV-PCS80732	•	•	•	•
PCS812 S7 connection		ZS12-DRV-PCS812	•	•	•	•
Phoenix Contact driver		ZS12-DRV-PHOENIX32	•	•	•	•
Pilz – PILZ-PSS driver		ZS12-DRV-PSS32	•	•	•	•
Profibus DP Master driver		ZS12-DRV-DPUNI32	•	•	•	•
Profibus FMS over Siemens PC card		ZS12-DRV-FMSNT	•	•	•	•
Reis – Reis Robotics driver		ZS12-DRV-REIS32	•	•	•	•
RTK Instruments – RTK9000 driver		ZS12-DRV-RTK9000	•	•	•	•
S5 H1 driver		ZS12-DRV-S5H1NT	•	•	•	•

ABB Ability™ zenon Developer Network Features

Feature	licensed on	ABB ID	ZDN ZDV	ZDN SUITE	ZDN EE	ZDN ZDMS
S5 TCP-IP driver		ZS12-DRV-S5TCP32	•	•	•	•
S7 driver Softnet based		ZS12-DRV-S7NT	•	•	•	•
S7 HMI adapter driver		ZS12-DRV-S7HMI	•	•	•	•
S7 MPI for CE terminals		ZS12-DRV-MPI	•	•	•	•
S7 TCP-IP driver		ZS12-DRV-S7TCP	•	•	•	•
Saia – Saia Direct driver		ZS12-DRV-SADIR	•	•	•	•
Saia – SAIA2ND32 driver		ZS12-DRV-SATCP	•	•	•	•
Schiele – Schiele S400 driver		ZS12-DRV-S432	•	•	•	•
Schweitzer – SEL Fast Msg.Protocol		ZS12-DRV-SEL	•	•	•	•
Siemens – S7 driver for S7-200		ZS12-DRV-S7PPI200	•	•	•	•
Siemens – S7 Spont		ZS12-DRV-S7SPONT	•	•	•	•
Siemens – S7-1200/1500 driver		ZS12-DRV-S7TIA	•	•	•	•
Siemens – Siclimat X Decos		ZS12-DRV-S7DCOS	•	•	•	•
Siemens – Siemens S5 PD driver		ZS12-DRV-S5PG32	•	•	•	•
Siemens – Simotion driver		ZS12-DRV-SIMOTION	•	•	•	•
Siemens – WINAC driver		ZS12-DRV-S7AC41x32	•	•	•	•
Siemens Sigmasys driver		ZS12-DRV-SIGMASYS	•	•	•	•
Sigmatek driver		ZS12-DRV-SIGMA32	•	•	•	•
Sigmatek Lasal Driver		ZS12-DRV-STLASAL	•	•	•	•
Sinthesi – PICnet driver		ZS12-DRV-SINTH	•	•	•	•
SNMP – SNMP Driver		ZS12-DRV-SNMP	•	•	•	•
SNMP – SNMP driver New Generation		ZS12-DRV-SNMPNG32	•	•	•	•
SQL – Write variable values in SQL		ZS12-DRV-ExportSQL	•	•	•	•
SQL Driver		ZS12-DRV-SQLDRV	•	•	•	•
straton NG driver		ZS12-DRV-StratonNG	•	•	•	•
Telco200 driver		ZS12-DRV-TELCO_32	•	•	•	•
TI 505 – 545 driver		ZS12-DRV-TI500	•	•	•	•
Trend – Trend Driver		ZS12-DRV-TREND32	•	•	•	•
Trend – Trend NG driver		ZS12-DRV-TrendNG	•	•	•	•
TwinCat NG driver		ZS12-DRV-BeckhNG	•	•	•	•
VDMA-XML driver		ZS12-DRV-VDMA_XML	•	•	•	•
VIPA CE touchpanel driver		ZS12-DRV-VIPA32	•	•	•	•
Volkswagen – Internal, time stamp		ZS12-DRV-Reflect	•	•	•	•
zenon Logic driver		ZS12-DRV-STRATON	•	•	•	•
zenon Remote Runtime driver		ZS12-DRV-RemoteRT	•	•	•	•
Energy drivers						
DNP3 – DNP3 3rd generation driver		ZS12-DRV-DNP3_TG			•	•
IEC – IEC 60870-5-103 driver		ZS12-DRV-IEC870-103			•	•
IEC – IEC 61499 driver		ZS12-DRV-IEC61499			•	•
IEC 61400-25-4 Annex C drv.		ZS12-DRV-IEC61400-25-4-C			•	•
IEC 61850 client driver		ZS12-DRV-IEC61850			•	•
IEC60870-5-101_104 driver		ZS12-DRV-IEC870			•	•
IEC-62056-21 Driver		ZS12-DRV-IEC62056			•	•
Modbus Energy driver		ZS12-DRV-MODBUS_E			•	•
Process Gateways						
OPC DA Server		ZS12-GW-OPC	•	•	•	•
OPC UA Server		ZS12-GW-OPCUA	•	•	•	•
MODBUS Slave		ZS12-GW-MODBUS	○	•	•	•
DEC SLAVE		ZS12-GW-DEC	○	•	•	•
SNMP SERVER/AGENT		ZS12-GW-SNMP	○	•	•	•
DNP3 SLAVE/OUTSTATION		ZS12-GW-DNP3	○	•	•	•
SQL ONLINE		ZS12-GW-SQL	○	•	•	•
ICCP/TASE.2/IEC 60870-6		ZS12-GW-ICCP	○	•	•	•
IEC60870 Slave		ZS12-GW-IEC60870SL	○	•	•	•
MS Azure		ZS12-GW-AZU	•	•	•	•
Web functionality						
Runtime connection			•	•	•	•
Runtime screen features limited						
Runtime screen features full			•	•	•	•
HTML5 Web Engine				•	•	•
HTTP tunneling				•	•	•
Redundancy				•	•	•
Routing				•	•	•
Support for MS IE			•	•	•	•
Support for MS IE, MS EDGE, Mozilla Firefox, Apple Safari, Google Chrome				•	•	•
Secure web communication			•	•	•	•
Web Read Access to Process Data			•	•	•	•
Web Write Access to Process Data			•	•	•	•

ABB Ability™ zenon Developer Network Features

Feature	licensed on	ABB ID	ZDN ZDV	ZDN SUITE	ZDN EE	ZDN ZDMS
Logic						
Logic Runtime with 8 TAGs						
Logic Runtime		ZSE12-LO-N	•	•	•	•
Logic workbench			•	•	•	•
Logic Monitoring Builder			•	•	•	•
Logic Monitoring Viewer			•	•	•	•
Logic drivers						
Logic Profibus Master driver		ZS12-LODRV-ProfDP	•	•	•	•
Logic Profinet IO RT Controller driver		ZS12-LODRV-PROFINETIORT	•	•	•	•
Logic Profinet IO RT Device driver		ZS12-LODRV-PNIODEV	•	•	•	•
Logic Ethernet/IP Scanner driver		ZS12-LODRV-EIPC	•	•	•	•
Logic Ethernet/IP Point IO driver		ZS12-LODRV-EIPFIO	•	•	•	•
Logic Ethernet/IP Adapter driver		ZS12-LODRV-EIPS	•	•	•	•
Logic Ethernet/IP Tag Client driver		ZS12-LODRV-EIPTag	•	•	•	•
Logic Modbus Master driver		ZS12-LODRV-MBMASTER	•	•	•	•
Logic Modbus Slave driver		ZS12-LODRV-MBSLAVE	•	•	•	•
Logic EtherCAT Master driver		ZS12-LODRV-Ethercat	•	•	•	•
Logic Open Powerlink Master driver		ZS12-LODRV-OpenEPL	•	•	•	•
Logic energy drivers						
Logic IEC61850 Client driver		ZS12-LODRV-850CL			•	•
Logic IEC61850 Server + GOOSE driver		ZS12-LODRV-850SeGo			•	•
Logic IEC60870 Master driver		ZS12-LODRV-870M101104			•	•
Logic IEC60870 Slave driver		ZS12-LODRV-870S101104			•	•
Logic DNP3 Master driver		ZS12-LODRV-DNP3MCD			•	•
Logic DNP3 Slave/Outstation driver		ZS12-LODRV-DNP3SCD			•	•
Logic IEEE C37.118 Client driver		ZS12-LODRV-IEEC37118CI			•	•
Logic IEEE 61850-90-5 Client		ZS12-LODRV-IEC850905CI			•	•
Report Engine						
Runtime connection			•	•	•	•
Analyzer Server		ZRE12-SRV		•		•
Analyzer Client		ZRE12-CL-X		1		1

N – Number of Tags
X – Number of Clients

ZDN Standard

Initial fee

Becoming a member of the ABB Ability™ zenon Developer Network requires the payment of an initial fee.

—

Developer Network Standard Membership Initial Fee		
ABB Order ID	ABB ID	PRODUCT
1SAS057007R1200	ZDN-ZDV12	zenon Developer Network Initial Fee

Annual fee

The annual fee includes software upgrades and premium support, each for the respective licenses purchased.

—

Developer Network Standard Membership Initial Fee		
ABB Order ID	ABB ID	PRODUCT
1SAS057001R1200	ZDN-ZDV12-1-SUP	zenon Developer Network Yearly Membership Fee, 1 Client
1SAS057002R1200	ZDN-ZDV12-3-SUP	zenon Developer Network Yearly Membership Fee, 3 Clients
1SAS057003R1200	ZDN-ZDV12-5-SUP	zenon Developer Network Yearly Membership Fee, 5 Clients
1SAS057004R1200	ZDN-ZDV12-10-SUP	zenon Developer Network Yearly Membership Fee, 10 Clients
1SAS057005R1200	ZDN-ZDV12-15-SUP	zenon Developer Network Yearly Membership Fee, 15 Clients
1SAS057006R1200	ZDN-ZDV12-20-SUP	zenon Developer Network Yearly Membership Fee, 20 Clients
1SAS057091R1200	ZDN-ZDV12-25-SUP	zenon Developer Network Yearly Membership Fee, 25 Clients
1SAS057092R1200	ZDN-ZDV12-30-SUP	zenon Developer Network Yearly Membership Fee, 30 Clients
1SAS057093R1200	ZDN-ZDV12-35-SUP	zenon Developer Network Yearly Membership Fee, 35 Clients
1SAS057094R1200	ZDN-ZDV12-40-SUP	zenon Developer Network Yearly Membership Fee, 40 Clients

Delivery includes

- Editor & Runtime with unlimited tags
- all PLC driver and bus drivers (Energy Edition drivers are not included!)
- Historian
- Extended Trend
- Reporting
- Recipegroup Manager
- Message Control
- PLC Diagnosis
- Industrial Maintenance Manager
- Industrial Performance Analyzer
- ALC – Automatic Line Coloring
- FDA 21CFR PART 11 with a mouse click
- Logic Workbench Pro (IEC 61131-3)
- Logic Runtime unlimited
- Programming Interface VBA/C#/VB.NET
- International language switch
- Remote engineering and maintenance
- Compatibility with older versions
- Web Server Pro Light, 3 Clients
- Process Gateway – OPC/OPC UA Server, MS Azure
- Batch Control SE, unlimited
- Historian SQL Server Interface (without CAL)
- Process Recorder
- GIS Editor and Control
- 3D Integration
- Load Management
- Everywhere Server (Smartphone Integration)

ZDN Suite

Initial fee

Becoming a member of the ABB Ability™ zenon Developer Network requires the payment of an initial fee.

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Developer Network Suite Membership Initial Fee		
ABB Order ID	ABB ID	PRODUCT
1SAS057019R1200	ZDN-SUITE12	zenon Developer Network SUITE Initial Fee

Annual fee

The annual fee includes software upgrades and premium support, each for the respective licenses purchased.

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Developer Network Suite Membership Yearly Fee		
ABB Order ID	ABB ID	PRODUCT
1SAS057013R1200	ZDN-SUITE12-1-SUP	zenon Developer Network SUITE Yearly Membership Fee, 1 Client
1SAS057014R1200	ZDN-SUITE12-3-SUP	zenon Developer Network SUITE Yearly Membership Fee, 3 Clients
1SAS057015R1200	ZDN-SUITE12-5-SUP	zenon Developer Network SUITE Yearly Membership Fee, 5 Clients
1SAS057016R1200	ZDN-SUITE12-10-SUP	zenon Developer Network SUITE Yearly Membership Fee, 10 Clients
1SAS057017R1200	ZDN-SUITE12-15-SUP	zenon Developer Network SUITE Yearly Membership Fee, 15 Clients
1SAS057018R1200	ZDN-SUITE12-20-SUP	zenon Developer Network SUITE Yearly Membership Fee, 20 Clients
1SAS057087R1200	ZDN-SUITE12-25-SUP	zenon Developer Network SUITE Yearly Membership Fee, 25 Clients
1SAS057088R1200	ZDN-SUITE12-30-SUP	zenon Developer Network SUITE Yearly Membership Fee, 30 Clients
1SAS057089R1200	ZDN-SUITE12-35-SUP	zenon Developer Network SUITE Yearly Membership Fee, 35 Clients
1SAS057090R1200	ZDN-SUITE12-40-SUP	zenon Developer Network SUITE Yearly Membership Fee, 40 Clients

Delivery includes

- Editor & Runtime with unlimited tags
- all PLC driver and bus drivers (Energy Edition drivers are not included!)
- Historian
- Extended Trend
- Reporting
- Recipegroup Manager
- Message Control
- PLC Diagnosis
- Industrial Maintenance Manager
- Industrial Performance Analyzer
- ALC – Automatic Line Coloring
- FDA 21CFR PART 11 with a mouse click
- Logic Workbench Pro (IEC 61131-3)
- Logic Runtime unlimited
- Programming Interface VBA/C#/VB.NET
- International language switch
- Remote engineering and maintenance
- Compatibility with older versions
- Web Server Pro, 3 Clients
- Process Gateway – OPC/OPC UA Server, MS Azure
- Batch Control Pro, unlimited
- Historian SQL Server Interface (without CAL)
- Process Recorder
- GIS Editor and Control
- 3D Integration
- Load Management
- Everywhere Server (Smartphone Integration)

+ Suite modules

- Production & Facility Scheduler
- SAP Interface
- Analyzer, 1 Client
- Process Gateways (Modbus Slave, SNMP, SQL, DEC, DNP3, IEC60870)
- Batch Control Pro, Unlimited Units

ZDN Energy

Initial fee

Becoming a member of the ABB Ability™ zenon Developer Network requires the payment of an initial fee.

Developer Network Energy Membership Initial Fee

ABB Order ID	ABB ID	PRODUCT
1SAS057037R1200	ZDN-EE12	zenon Developer Network Energy Initial Fee

Annual fee

The annual fee includes software upgrades and premium support, each for the respective licenses purchased.

Developer Network Energy Membership Annual Fee

ABB Order ID	ABB ID	PRODUCT
1SAS057037R1200	ZDN-EE12-1-SUP	zenon Developer Network Energy Yearly Membership Fee, 1 Client
1SAS057038R1200	ZDN-EE12-3-SUP	zenon Developer Network Energy Yearly Membership Fee, 3 Clients
1SAS057039R1200	ZDN-EE12-5-SUP	zenon Developer Network Energy Yearly Membership Fee, 5 Clients
1SAS057040R1200	ZDN-EE12-10-SUP	zenon Developer Network Energy Yearly Membership Fee, 10 Clients
1SAS057041R1200	ZDN-EE12-15-SUP	zenon Developer Network Energy Yearly Membership Fee, 15 Clients
1SAS057042R1200	ZDN-EE12-20-SUP	zenon Developer Network Energy Yearly Membership Fee, 20 Clients
1SAS057073R1200	ZDN-EE12-25-SUP	zenon Developer Network Energy Yearly Membership Fee, 25 Clients
1SAS057074R1200	ZDN-EE12-30-SUP	zenon Developer Network Energy Yearly Membership Fee, 30 Clients
1SAS057075R1200	ZDN-EE12-35-SUP	zenon Developer Network Energy Yearly Membership Fee, 35 Clients
1SAS057076R1200	ZDN-EE12-40-SUP	zenon Developer Network Energy Yearly Membership Fee, 40 Clients

Delivery includes

- Energy Editor & Energy Server with unlimited tags
- ALC – Automatic Line Coloring (incl. Transformer)
- Logic Workbench Pro (IEC 61131-3)
- Logic Runtime unlimited
- Programming Interface VBA/C#/VB.NET
- International language switch
- Remote engineering and maintenance
- Compatibility with older versions
- Screen alarming
- Interlocking
- Command Sequencer
- Web Server Pro, 3 Clients
- Historian SQL Server Interface (without CAL.)
- ZSQLSRV_EXSQL)
- Load Management
- 3D Integration
- GIS Editor and Control
- Process Recorder
- Everywhere Server – Smartphone Integration
- All PLC driver and bus driver included (IEC61850, IEC60870-5-101/-103/-104, DNP3_TG, IEC61400-25, IEC62056-21, Modbus Energy)
- Historian
- Extended Trend
- Reporting
- Recipegroup Manager
- Message Control
- Industrial Performance Analyzer
- PLC Diagnosis
- Industrial Maintenance Manager
- Process Gateway – OPC/OPC UA Server
- Process Gateway – IEC 60870 Slave
- Process Gateway – DNP3 Outstation
- Process Gateway – ICCP Tase.2
- Process Gateway – Modbus Slave
- Process Gateway – SNMP Agent
- Process Gateway – Azure Gateway
- Process Gateway – DEC Slave
- Process Gateway – SQL Online

Automatic Line Coloring (ALC) includes the topological coloring of elements and allows easy automatic animation of these elements in the Energy Industry. The following procedural elements are available: Source, Terminator, Switch, Link, and Transformer.

ZDN Distribution Management

Initial fee

Becoming a member of the ABB Ability™ zenon Developer Network requires the payment of an initial fee.

Developer Network Distribution Management Membership Initial Fee

ABB Order ID	ABB ID	PRODUCT
1SAS057059R1200	ZDN-EEDMS12	zenon Developer Network Energy DMS Initial Fee

Annual fee

The annual fee includes software upgrades and premium support, each for the respective licenses purchased.

Developer Network Distribution Management Membership Annual Fee

ABB Order ID	ABB ID	PRODUCT
1SAS057077R1200	ZDN-EEDMS12-1-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 1 Client
1SAS057082R1200	ZDN-EEDMS12-3-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 3 Clients
1SAS057086R1200	ZDN-EEDMS12-5-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 5 Clients
1SAS057078R1200	ZDN-EEDMS12-10-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 10 Clients
1SAS057079R1200	ZDN-EEDMS12-15-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 15 Clients
1SAS057080R1200	ZDN-EEDMS12-20-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 20 Clients
1SAS057081R1200	ZDN-EEDMS12-25-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 25 Clients
1SAS057084R1200	ZDN-EEDMS12-35-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 35 Clients
1SAS057083R1200	ZDN-EEDMS12-30-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 30 Clients
1SAS057085R1200	ZDN-EEDMS12-40-SUP	zenon Developer Network Energy DMS Yearly Membership Fee, 40 Clients

Delivery includes

- Editor & Server with unlimited tags
- All PLC driver and bus driver included (IEC61850, IEC60870-5-101/-103/-104, DNP3_TG, IEC61400-25, IEC62056-21, Modbus Energy)
- Historian
- Extended Trend
- Reporting
- Recipegroup Manager
- Message Control
- Industrial Performance Analyzer
- PLC Diagnosis
- Industrial Maintenance Manager
- ALC – Automatic Line Coloring (incl. Transformer)
- Support for CE projects
- Logic Workbench Pro (IEC 61131-3)
- Logic Runtime unlimited
- Programming Interface VBA/C#/VB.NET
- International language switch
- Remote engineering and maintenance
- Compatibility with older versions
- Screen alarming
- Interlocking
- Command Sequencer
- Smart Server Pro, 3 Clients
- Historian SQL Server Interface (without CAL; ZSQLSRV_EXSQL)
- Load Management
- 3D Integration
- GIS Editor and Control
- Process Recorder
- Everywhere Server – Smartphone Integration
- Process Gateway – OPC/OPC UA Server
- Process Gateway – IEC 60870 Slave
- Process Gateway – DNP3 Outstation
- Process Gateway – ICCP Tase.2
- Process Gateway – Modbus Slave
- Process Gateway – SNMP Agent
- Process Gateway – Azure Gateway
- Process Gateway – DEC Slave
- Process Gateway – SQL Online

DMS modules

- Topology Package
- Load Flow Calculation
- State Estimator
- SAP Interface
- Production & Facility Scheduler
- Analyzer, 1 Client

Trainings & Services



ABB provides a wide range of available trainings and customized professional services to guide the users towards the best ABB Ability™ zenon customer experience.

Professional services

ABB delivers a full range of professional services, trainings and know-how to support the ABB Ability™ zenon experience.

- Productize solutions based on ABB Ability™ zenon
- Get turn key solutions and engineering services in shorter project times and reduced project cost
- Actively learn and leverage from ABB Ability™ zenon and other ABB products' know-how for future projects

Training & Certification

The available trainings, e-learning, webinars and resources to be guided in a new ABB Ability™ zenon learning experience are available at <https://mylearning.abb.com>. In case personalized trainings are needed, contact your usual ABB sales representative.

The completion of every training course provides dedicated ABB certifications. Organizations with certified employees can benefit from membership in the ABB Authorized Value Provider Program and the ABB Ability™ zenon Developer Network.

- Standardized agenda
- Simple on-boarding: from basic to complex topic, every training provides accessible explanations to guide the learning experience.
- Learning by doing: practical examples are a core part of the learning experience, dedicated time and space is offered to get acquainted with the new concepts and procedures.

Contact us:
zenon.training@abb.com
zenon.sales@abb.com

Training		
ABB Order ID	ABB ID	PRODUCT
1SAS057180R9999	DL-ZBAST-ELEARN	zenon Basic Technical Training, eLearning
1SAS057181R9999	DL-ZNRGT-ELEARN	zenon Energy Technical Training, eLearning

Cyber security



ABB provides the defense-in-depth security required for digital solutions in mission-critical applications and industries.

With the early days of cloud enablement behind us, it's clear that "security" means much more than protection against cybercrime: certainly connections need to be safe, but the value of that data should also be protected. Customers should not be required to forfeit safety, value, or control in order to realize the benefits of digitization, and ABB Ability™ closes the loop between these needs with an innovative, multi-layered approach to security:

Connectivity

The majority of the 70 million ABB connected devices working for customers around the world require built-in safety standards that, by definition, must also be secure. ABB Ability™ zenon is designed to ensure secure, optimized, uninterrupted operation. ABB Ability™ zenon cyber security is proven by an independent internal test center, complies with IEC62351 and is certified according to IEC62443-4-1.

Data

ABB Ability™ zenon protects sensible operations data, securely stores it on customers premises. ABB Ability™ zenon implements encryption, i secure communication and role based access control to keep its users under full control and ownership of their data. ABB Ability™ zenon is a compiled system, meaning only a few binary files are residing with the Runtime. Therefore, it is almost impossible to tamper with any of the ABB Ability™ zenon files.

Standards

ABB innovates digital security via its Group Cyber Security Council, and participates in standardization efforts such as Platform Industrie 4.0 and Industrial Internet Consortium. It also works with dozens of universities, and brings together leading minds annually for its Global Technology Forum, to provide our customers with highest levels of cyber secure products.

ABB Ability™ zenon Cyber Security features

- IEC62443-4-1 certified
- IEC 62351 compliant
- IEC 61850 authentication
- DNP 3 secure authentication v2 and v5
- TLS for IEC 60870 104 and DNP3
- Encrypted network communication
- Operations Data encryption
- Certified for Windows 10 and 11 – supporting all Windows security features
- Active Directory for user administration
- Signed files
- Password protected SQL database access
- Action locking/attribution to user rights
- History of changes
- Chronological Event List (CEL) logging security incidents
- Webserver offers HTTP Tunneling
- Webserver available solely for monitoring without operational functions
- Authorization via Equipment Model

Our Offering

Industrial Cyber Security Guide – <https://new.abb.com/industrial-software/industrial-cyber-security-guide>

ABB Ability™ zenon Cyber Secure Deployment Guideline – <https://search.abb.com/library/Download.aspx?DocumentID=3AX-D50000768295&LanguageCode=en&DocumentPartId=&Action=Launch>

Trace potential ABB Ability™ zenon Vulnerabilities – <https://global.abb/group/en/technology/cyber-security/alerts-and-notifications>

Report ABB Ability™ zenon Vulnerabilities – <mailto:cybersecurity@ch.abb.com>

For more information, please contact your local ABB representative or visit

www.abb.com/zenon
zenon.sales@abb.com
zenon.support@abb.com

Life Cycle



ABB has defined a product support lifecycle policy for its process automation control systems and products to help our customers’ predict support for their automation assets. This policy then forms the basic lifecycle management foundation for ABB.

Our extensive experience and top solutions help our customers extend, analyse and optimise the lifecycle of their equipment.

The life cycle management model divides a product's life cycle into four phases: active, classic, limited and obsolete. Each phase has different implications for the end-user in terms of services provided.



Product life cycle management model

Active phase
The active phase starts when the product is launched. In the active phase the end user benefits from different warranty options and other services such as training and technical support. Complete life cycle services from support and maintenance are also provided. The active phase ends when the volume production of a particular ABB Ability™ zenon version ceases and ABB issues an announcement of the life cycle phase change.

Classic phase
ABB Ability™ zenon users continue to benefit from complete life cycle services throughout the classic phase. The classic phase is closely aligned with ABB's research and development work to provide continuing support for its ABB Ability™ zenon products while developing future generations. In the classic phase development may be required to provide the maintenance techniques and updates needed to guarantee that ABB Ability™ zenon continues to operate at its peak performance. Migration to a new ABB Ability™ zenon version is recommended before the product has entered the limited phase.

Limited phase
In the limited phase the product development has come to its end. Security updates are available as long as core technologies and operating systems can be obtained. Towards the end of the limited

phase, services gradually become obsolete. In addition to the annual life cycle status reviews, ABB issues a life cycle phase change announcement, half a year prior the product becoming obsolete. This is the last opportunity to transfer to new technology before product support ends.

Obsolete phase
The product is transferred to the obsolete phase when it is no longer possible to provide services at reasonable cost or when ABB can no longer support the product technically or the old technology is not available.

- Benefits of life cycle management**
The ABB Ability™ zenon software life cycle management maximizes the value of the equipment and its maintenance investments by:
- ensuring update services and ABB competence availability throughout the lifetime
 - enabling efficient product support and maintenance for improved reliability
 - adding functionality to the initial product by upgrading it
 - providing a smooth transition to new technology at the end of the product lifetime

Services offered for ABB's automation and electrification products span the entire asset lifetime, from the moment a customer makes the first inquiry to decommissioning and upgrading the product. Throughout the life cycle of an asset, ABB provides training, technical support and customized contracts, supported by one of the world's most extensive global sales and service networks.

ABB Ability™ zenon Lifecycle Status

Version	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
ABB Ability zenon 7.50	A	A	A	C	C	L	L	L	L	L	O	O	O	O	O	O	O	O	O	O
ABB Ability zenon 7.60		A	A	A	C	C	C	L	L	L	L	O	O	O	O	O	O	O	O	O
ABB Ability zenon 8.00				A	A	C	C	L	L	L	L	L	L	O	O	O	O	O	O	O
ABB Ability zenon 8.10					A	A	A	C	L	L	L	L	L	O	O	O	O	O	O	O
ABB Ability zenon 8.20						A	A	A	C	C	L	L	L	L	L	O	O	O	O	O
ABB Ability zenon 11.0.0							A	A	A	C	C	L	L	L	L	L	O	O	O	O
ABB Ability zenon 12.0.0								A	A	A	C	C	C	L	L	L	L	L	O	O
ABB Ability zenon x									A	A	A	A	A	A	A	A	A	A	A	A

Prepurchase

ABB provides a range of services and support guiding the customers to the ideal products for their applications.

Order and delivery

Orders can be issued at any ABB office or channel partner. In some countries, ABB also offers an online order tracking system. ABB's sales and service network ensures timely deliveries and also offers express delivery.

Installation and commissioning

While many customers have the resources to perform installation and commissioning on their own, ABB and its channel partners offer professional installation and start-up services, as well as solution development support for OEM and System Integrators.

Operation and maintenance

From maintenance assessments and preventive maintenance of installation in site or remotely, ABB has all the options covered to keep their customers' processes operational.

Upgrade

Frequently, ABB products can be upgraded to the latest software in order to improve the performance of the application.



For more information, please contact
your local ABB representative or visit

new.abb.com/medium-voltage/
www.abb.com/zenon
zenon.sales@abb.com
zenon.support@abb.com