

Kepware Server Datasheet



Table of contents

1

Kepware Server overview

2

Kepware Server capabilities & features

3

Kepware Server pricing

4

Kepware Server trial

5

Conclusion

Kepware Server overview

Transform vendor-specific data into accessible data

Manufacturing is evolving fast – and the demand for accessible, reliable data has never been higher. As data becomes the engine of modern operations, critical information remains trapped in legacy equipment, proprietary protocols, and isolated systems. Organizations need a proven way to bridge OT and IT so they can unlock this intelligence and keep pace with accelerating digital requirements. That's why manufacturers worldwide rely on Kepware to bring structure, quality, and trust to their industrial data foundation.

For more than 30 years, Kepware Server has been the industry's most trusted standard for secure, scalable industrial connectivity. It unlocks OT data with prebuilt device integrations, transformation tools, and robust interoperability that eliminates the need for custom code or hardware changes. Kepware Server's compatibility with Kepware+ Manager enables secure remote configuration and centralized fleet management at scale. When manufacturers need dependable connectivity to fuel smarter decisions and sustainable growth, Kepware stands out as the proven choice.



Kepware Server capabilities & features

Key capabilities for industrial connectivity

Pre-built device connectivity

Kepware Server offers the broadest range of drivers available – more than 150 – supporting thousands of devices, both modern and legacy, across industry verticals. These drivers accommodate a wide range of control architectures, enabling reliable communications regardless of how data is initiated or managed. Kepware Server drivers support a variety of wired and wireless network mediums for Ethernet, serial, and proprietary networks. Although most drivers connect directly with hardware devices, some are designed to connect with other applications – such as databases, custom software applications, or other OPC servers.

OT data aggregation

Kepware connects thousands of data sources and consolidates them into secure open standard interfaces. This streamlined design simplifies configuration and eliminates complexity across your architecture. The result is normalized, reliable data delivered to hundreds of applications with ease.

Data transformation

In addition to passing raw values to connected applications, Kepware Server can scale data, perform arithmetic expressions, and apply deadband calculations to filter out unnecessary updates. For example, it can convert a sensor's 0–100% signal into engineering units like 0–300°F before sending it downstream. It can also compute derived values, such as calculating overall equipment load by adding or averaging multiple input points, so applications receive meaningful, pre-processed data. By performing these transformations at the source, Kepware reduces bandwidth consumption workload by transmitting only the most critical changes.

Kepware Server capabilities & features

Secure OT & IT integrations

Kepware Server delivers real-time industrial data to both OT and IT applications, enabling actionable insights across the enterprise. It streams data directly into data lakes, IoT platforms, & AI tools, with flexible support for OPC UA, MQTT, and REST so organizations can choose the vendors and communication methods that best fit their needs.

Key integrations include:

MQTT specifications & features

Supported specifications

- MQTT 3.1.1

Supported features

- Offers customizable JSON data format to support most MQTT applications
- Supports MQTT Version 3.1.1, including publish and subscription methods
- Supports advanced formatting for multiple data models (JSON, XML, CSV and custom)
- Supports deadband to limit data throughput
- Supports tag import and export for quick project configuration and deployment
- Has a configurable Publish Rate
- Has a configurable data package size for single transactions
- Supports MQTT security and data integrity features, including Transport Layer Security (TLS), certificate-based authentication, username/password authentication, Last Will and Testament, and Quality of Service message delivery
- Supports self-signed client certificates, enabling certificate authentication for integration

Kepware Server capabilities & features

OPC UA specifications & features

Supported specifications

- 1.02 optimized binary TCP

Supported features

- Standard UA Server Profile
- Core Server Facet
- Data Access Server Facet
- SecurityPolicy – Basic128Rsa15 (Deprecated)
- SecurityPolicy – Basic256 (Deprecated)
- SecurityPolicy – Basic256Sha256
- SecurityPolicy – None (Insecure)
- UA-TCP UA-SC UA Binary

ThingWorx Native Interface cloud integrations

- Amazon Web Services
- Microsoft Azure

Kepware Server provides broad, standards-based connectivity that allows industrial data to flow reliably and seamlessly into the IT systems that need it. For applications that don't require live streaming, it can deliver processed or historical information through scheduled transfers to databases or other downstream systems, ensuring the right data is available when and where it's needed. This flexible approach supports everything from routine reporting to advanced analytics without adding unnecessary load to networks or applications.

Kepware+ Manager compatible

Kepware Server delivers powerful industrial connectivity with over 150 pre-built drivers, enabling secure scalable data flow across OT and IT systems. When paired with Kepware+ Manager, this connectivity can be centrally monitored, configured, and managed across sites and servers. Together Kepware Server and Kepware+ Manager simplify administration while supporting real-time insights across modern industrial environments.

Device connectivity | Driver list

Simplifying connectivity through extensive driver coverage

Kepware Server delivers unmatched device connectivity with the industry's most extensive library with over 150 pre-built drivers. This breadth of support enables seamless integration with virtually any industrial asset – including PLCs, RTUs, sensors, actuators, and edge devices – across both modern and legacy systems.

Breadth of connectivity – Driver components

- ABB Totalflow Serial
- Advanced Simulator
- Allen-Bradley 1609 UPS
- Allen-Bradley Bulletin 900
- Allen-Bradley ControlLogix Ethernet
- Allen-Bradley ControlLogix Server
- Allen-Bradley DF1
- Allen-Bradley Ethernet
- Allen-Bradley Server
- Allen-Bradley Micro800 Ethernet
- Allen-Bradley Micro800 Serial
- Alstom Redundant Ethernet
- Analog Devices
- Aromat Ethernet
- Aromat Serial
- Automation Direct DirectNET
- Automation Direct EBC
- Automation Direct ECOM
- Automation Direct K Sequence
- Automation Direct Productivity
- Series Ethernet
- BACnet/IP
- Beckhoff TwinCAT I/O
- Bristol/IP
- BUSWARE Ethernet
- CODESYS Ethernet
- Contrex M-Series
- Contrex Serial
- Custom Interface Driver
- Cutler-Hammer D50/D300
- Cutler-Hammer ELC Ethernet
- Cutler-Hammer ELC Serial
- Dataforth isoLynx
- DDE Client Driver
- DNP3 Client Ethernet
- DNP3 Client Serial
- Enron Modbus
- EUROMAP 63
- Fanuc Focas Ethernet
- Fanuc Focas HSSB
- Fisher ROC Ethernet
- Fisher ROC Plus Ethernet
- Fisher ROC Plus Serial
- Fisher ROC Serial
- Fuji Flex
- GE CCM
- GE EGD
- GE Ethernet
- GE SNP
- GE SNPX
- Honeywell HC900 Ethernet
- Honeywell UDC Ethernet
- Honeywell UDC Serial
- IDEC Serial
- IEC 60870-5-101 Master
- IEC 60870-5-104 Master
- IEC 61850
- Intelligent Actuator (IA) Super SEL
- InTouch Client Driver
- IOtech PointScan 100
- Keyence KV Ethernet
- Krauss Maffei MC4 Ethernet
- Lufkin Modbus Serial

Device connectivity | Driver list

Breadth of connectivity – Driver components

- Memory Based
- Mettler Toledo
- Micro-DCI
- Mitsubishi CNC Ethernet
- Mitsubishi Ethernet
- Mitsubishi FX
- Mitsubishi FX Net
- Mitsubishi Serial
- Modbus ASCII
- Modbus Ethernet
- Modbus Plus
- Modbus RTU Serial
- Modbus RTU Server Serial
- MQTT Client
- MTConnect
- ODBC Client
- OMNI Flow Computer
- Omron FINS Ethernet
- Omron FINS Serial
- Omron Host Link
- Omron NJ Ethernet
- Omron Process Suite
- Omron Toolbus
- OPC DA Client
- OPC UA Client
- OPC XML-DA Client
- Optimization OptiLogic
- Opto 22 Ethernet
- Partlow ASCII
- Philips P8/PC20
- Ping
- SattBus Ethernet
- Scanivalve Ethernet
- Siemens S5
- Siemens S5 3964R
- Siemens S7 MPI
- Siemens S7-200
- Siemens S7 Plus Ethernet
- Siemens TCP/IP Ethernet
- Siemens TCP/IP Unsolicited Ethernet
- Simatic/TI 505 Ethernet
- Simatic/TI 505 Serial
- Simulator
- SIXNET EtherTRAK
- SIXNET UDR
- SNMP
- SquareD
- System Monitor
- Telemecanique Uni-Telway
- Thermo Westronics Ethernet
- Thermo Westronics Serial
- Tiway Host Adapter
- Torque Tool Driver
- Toshiba Ethernet
- Toshiba Serial
- Toyopuc PC3/PC2 Ethernet
- Toyopuc Serial
- Triconex Ethernet
- Universal Device Driver (UDD)
- User Configurable (U-CON)
- WAGO Ethernet
- Weatherford 8500
- WITS Level O Active
- WITS Level O Passive
- Yaskawa Memobus Plus
- Yaskawa MP Series Ethernet
- Yaskawa MP Series Serial
- Yokogawa Controller
- Yokogawa CX
- Yokogawa Darwin Ethernet
- Yokogawa Darwin Serial
- Yokogawa DX Ethernet
- Yokogawa DX Serial
- Yokogawa DXP
- Yokogawa GX Ethernet
- Yokogawa HR
- Yokogawa MW
- Yokogawa MX
- Yokogawa YS100

...and more each year

(Last edit March 2023)

OT/IT integrations | Open standards, named integrations

Secure & scalable OT/IT interoperability

Kepware Server connects your entire industrial ecosystem – bridging OT and IT with secure, real-time data delivery to virtually any application. From plant-floor devices to enterprise systems, Kepware simplifies integration and accelerates digital transformation. With support for open standards and leading platforms, it enables seamless connectivity across operations.

HMI:

- Rockwell Automation FactoryTalk View/Panelview
- Siemens WinCC/Comfort Panels
- Schneider Electric EcoStruxure Operator Terminal Expert/Harmony
- AVEVA InTouch
- Inductive Automation Ignition Perspective/Vision

SCADA:

- AVEVA System Platform
- Siemens WinCC (TIA Portal & WinCC OA)
- Ignition by Inductive Automation
- Velotic Proficy iFIX/Proficy Operations Hub
- Rockwell Automation FactoryTalk View SE

Cloud:

- AWS
- Google
- Microsoft Azure

OT/IT integrations | Open standards, named integrations

ERP:

- SAP S/4HANA
- Oracle ERP Cloud
- Microsoft Dynamics 365 (Finance & Operations/Business Central)
- Infor CloudSuite (LN/M3)
- NetSuite (owned by Oracle)

Data Ops:

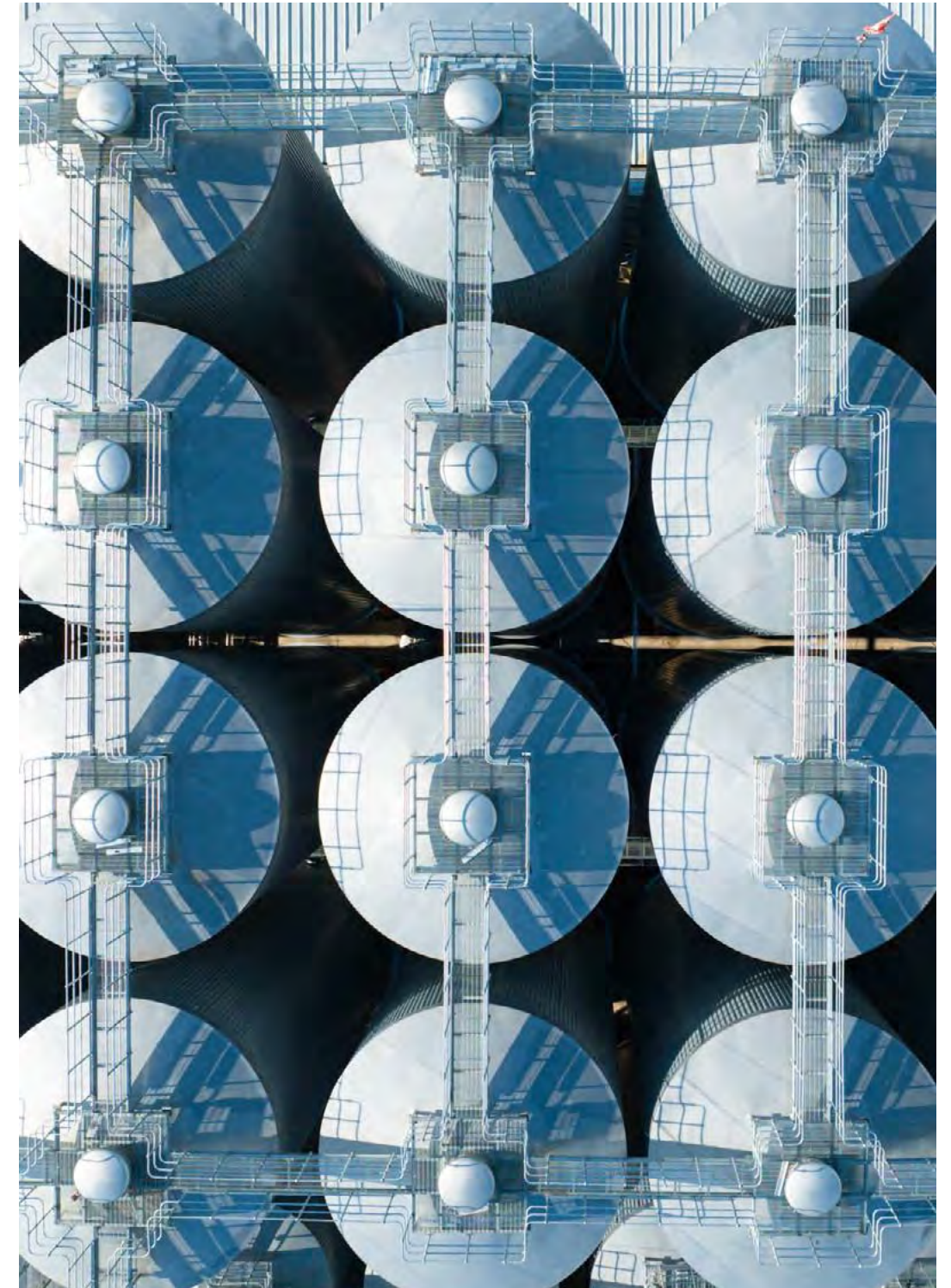
- HighByte Intelligence HubCognite Data Fusion
- Seeq (with Seeq Data Lab)
- Tulip (Manufacturing App + Data Engineering Layer)
- HiveMQ

Historians:

- AVEVA PI System (formerly OSIsoft PI)
- Canary Historian
- Velotic Proficy Historian
- Ignition Tag Historian (with SQL or Time-Series DB)
- Siemens WinCC Historian

IoT Platforms:

- Velotic ThingWorx
- Siemens Industrial Edge/MindSphere
- AWS IoT for Manufacturing
- Microsoft Azure IoT
- Velotic Proficy Operations Hub/Plant Applications



Data normalization | Advanced tags



Consistent operations with advanced tags plug-in

Kepware Server simplifies data normalization by transforming proprietary device data into standardized, context-rich tags that applications can immediately use. With the Advanced Tags plug in, data from diverse devices can be aggregated and organized – for example, converting raw PLC values into consistent engineering units or combining multiple inputs into a single, meaningful operational tag.

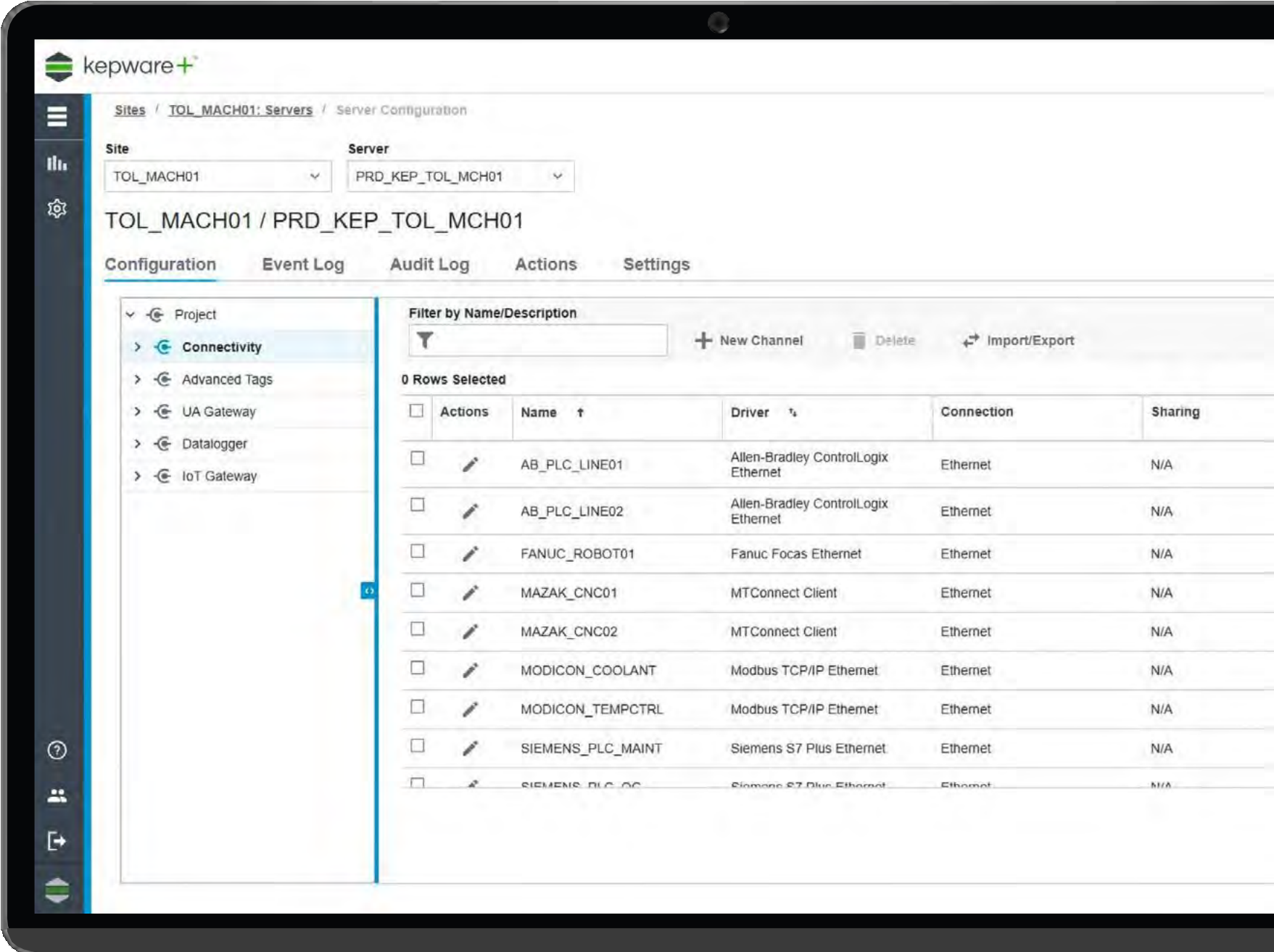
Built-in capabilities such as scaling, arithmetic expressions, and deadband calculations help filter noise and reduce bandwidth while preserving critical changes. The result being consistent, easy-to-interpret data that gives downstream systems clearer insight and accelerates the path from industrial data to business value.

Enterprise administration | Kepware+ Manager

Unified oversight with Kepware+ Manager

Kepware Server's integration with Kepware+ Manager enables organizations to efficiently manage large-scale industrial deployments by centralizing monitoring and configuration across multiple servers. Kepware+ Manager provides secure, streamlined control, allowing users to oversee connectivity, data aggregation, and transformation from a single interface.

This compatibility ensures that enterprises can scale their operations while maintaining robust OT and IT integrations, reducing complexity and cybersecurity risks. By leveraging Kepware+ Manager, users benefit from simplified management, improved reliability, and the ability to unlock and normalize data from diverse industrial devices without costly hardware upgrades.



Kepware Server technical details

Technical information & resources

Topic name	Details
Supported OS	Windows 11 Windows Server 2025 Windows Server 2022 Windows Server 2019 Windows Server 2016
System requirements	https://support.ptc.com/help/kepware/kepware_server/en/
Available languages	English, German, Japanese, Simplified Chinese
Documentation	Driver manuals can be found in the <u>Kepware Store</u> associated with each driver. For additional resources visit PTC eSupport or MyKepware.

Kepware Server pricing

Flexible licensing to fit every need

Kepware Server is designed to meet the diverse needs of industrial organizations by offering a range of flexible pricing and licensing options. Whether you're starting small, scaling up, or deploying across an entire enterprise, Kepware makes it easy to select the model that best fits your connectivity requirements and budget. The available options include:

- **À la carte:**

Purchase only the drivers and features you need, priced individually. This option is ideal for organizations looking to scale as their automation requirements evolve. Drivers and features are available for purchase anytime through the online store.

- **Suites:**

Choose from bundles tailored by industry, device brand, or specific project challenges. Suites provide added value for smart manufacturing initiatives and make it easy to deploy comprehensive solutions.

- **Enterprise licenses:**

Enable organization-wide connectivity with enterprise licensing. This model offers centralized control, enhanced security, and scalable deployment across multiple locations and teams.



Get started with a free trial

Get up & running with Kepware Server

Getting started with Kepware Server is simple and flexible, allowing users to move from installation to live data in minutes. With an intuitive configuration experience, manufacturers can quickly connect to devices, organize data, and verify real-time communication – making it easy to evaluate value right away.

Customers can explore product options through a free trial, start small by purchasing via the PTC Store, or work with a Kepware expert or trusted partner as needs grow – licenses can be easily expanded or converted over time. Comprehensive documentation, videos, and support resources help teams deploy, scale, and manage connectivity with confidence.



Conclusion

Kepware Server: The proven standard

Kepware Server the connectivity foundation manufacturers need to turn industrial data into action. By reliably unifying data from diverse assets and systems, it enables organizations to move faster – from modernizing operations to scaling analytics and cloud initiatives with confidence. With Kepware, industrial data becomes a strategic asset that supports smarter decisions today and future-ready growth initiatives tomorrow.

