

## Kollmorgen Automation Suite™ (KAS)

Premier machine automation programming package for high-performance motion and control in minutes

**KOLLMORGEN**

A REGAL REXNORD BRAND

# Accelerate development. Simplify control. Maximize performance.

Today's OEMs must deliver differentiated, high-performance machines quickly to stay competitive. Kollmorgen Automation Suite (KAS) delivers a complete, integrated software and hardware platform designed to accelerate machine development, simplify programming, and ensure precise, reliable performance for advanced automation.

## Single point of control

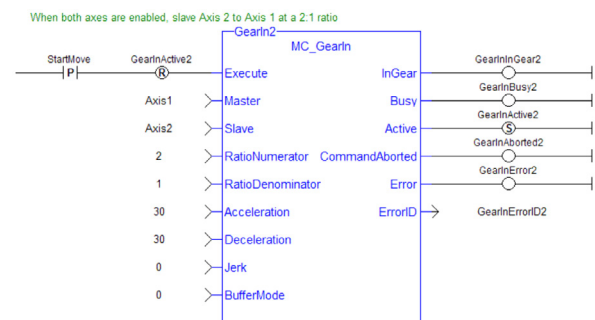
Faster, more efficient motion design starts with the KAS Integrated Development Environment (IDE). This platform provides all the tools to design, program, configure, debug and maintain machine applications — all from a single connection.

## Programming made easy

From motion programming to full automation control, KAS helps you achieve better machine control, faster. The platform supports the industry-standard IEC 61131-3 programming toolkit with automated features like EtherCAT® device scanning, auto-configuration and a CAM editor to simplify development and commissioning. In addition, PLCopen® commands for motion offers plug-and-play design and quick-start templates with standardized function blocks to increase efficiency and speed during the programming process.

### KAS Programming

- Accelerate development by programming tasks in hours that would otherwise take weeks.
- Improved coding quality through PLCopen motion function blocks and by using pre-built Kollmorgen Function Blocks that have been extensively tested and optimized.
- Easy knowledge transfer, replacing complex, proprietary code languages with easy to understand IEC 61131 language function blocks.
- Available on PCMM2G and AKD PDMM controllers.



KAS provides easy to understand function blocks to easily translate the mechanical operation of the machine into logical code. Build your application with PLC Function Blocks like MC\_GearIn and MC\_TouchProbe that help to quickly and efficiently write code that matches the machine's function. Other Kollmorgen function blocks such as MCFB\_GearedWebTension allow you to integrate powerful features that have already been developed and tested by our best motion experts.

## Built-in tools to enhance performance

Digital diagnostic and troubleshooting features, including online edits, built-in help files, a full-featured oscilloscope and break-point testing, make setup and tuning intuitive. Comprehensive simulation tools further support application development and debugging without requiring hardware, removing steps and hassle. Together, these capabilities shorten commissioning time, improve accuracy and are backed by Kollmorgen's expert guidance.

## Integrated safety at every step

KAS integrates safety for all components of the control system. SafeMotion™ capabilities ensure local drive safety, while the SafePLC2 programming environment provides certified functional safety and system-level I/O control — all connected through a single, unified platform.

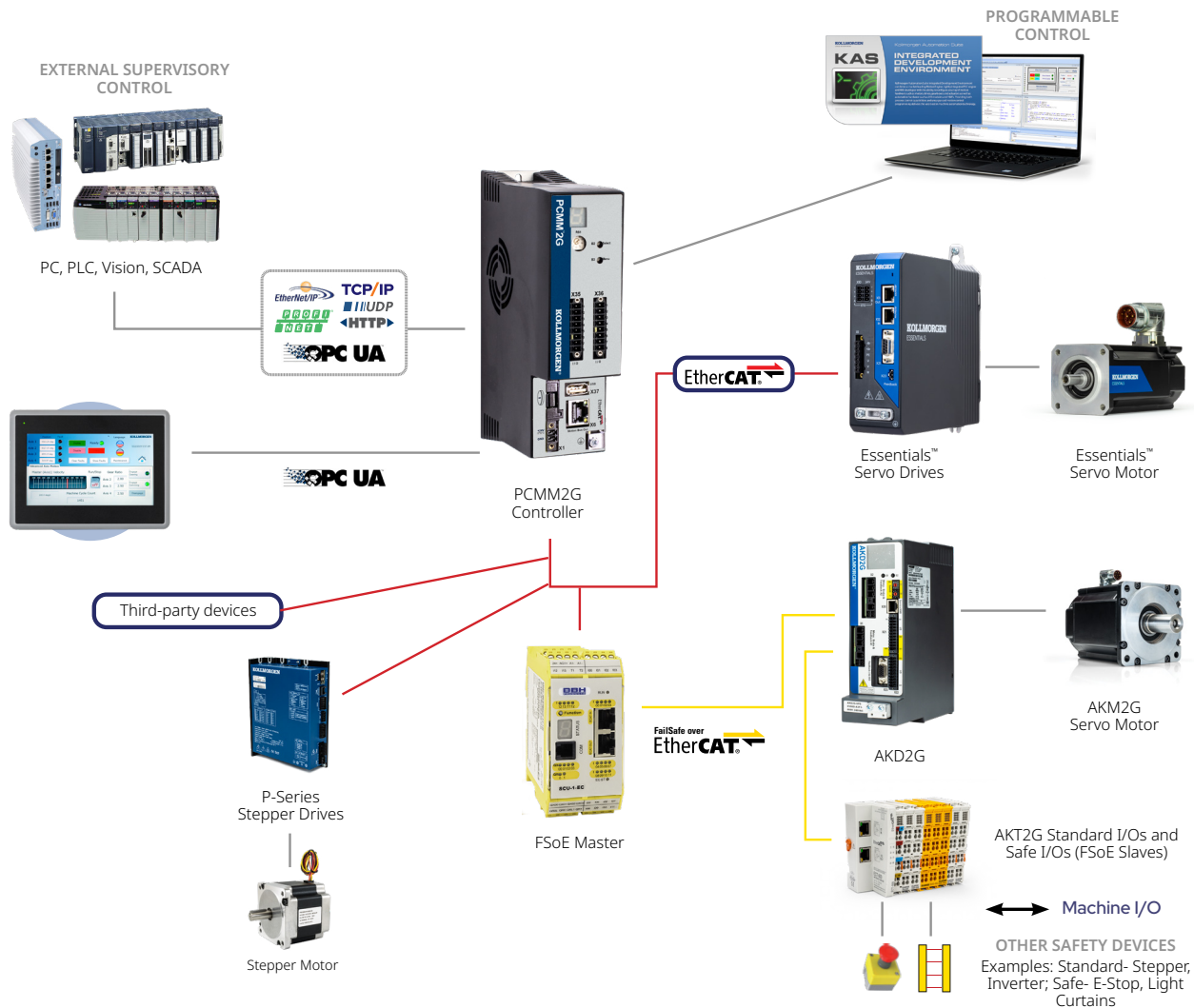
## Seamless connectivity

An integrated OPC UA Server connects HMIs and other controllers, while an on-board Web Server hosts configurable web pages accessible from any browser on the same Ethernet network for diagnostics and simple controls. With Network Time Protocol (NTP) functionality, the controller can synchronize its internal clock with external time-keeping servers to ensure highly coordinated motion across the machine and all automation equipment.



# A fully integrated system

With Kollmorgen Automation Suite, high-performance controllers, drives, motors, I/O, steppers and cables all come together in a strong, integrated system — to fully automate and control every axis of your entire application.



## Software platform

From configuration and tuning to diagnostics and communication, KAS provides a single, intelligent software environment for every stage of motion integration. Manage multi-axis systems, safety functions, and connectivity through a single interface to reduce complexity and improve reliability. Plus, USB Backup and Restore features make it easy to update or duplicate controllers directly from a USB drive to simplify maintenance and system recovery, no laptop or additional software required.

## Controller hardware

KAS integrates seamlessly with Kollmorgen and third-party automation controllers to reduce setup time, consolidate software and single-source ordering, and provide greater versatility. Features include plug-and-play capabilities, integrated tools and broad fieldbus compatibility with simplified third-party device setup via direct import of EtherCAT configuration files.

### PCMM2G general automation controller

Kollmorgen's next-generation PCMM2G automation controller offers compatibility with existing PCMM1G and PDMM systems, plus 1.5 to 3.5 times the speed. It also works with third-party devices, supporting all system standards while improving performance and ease of use.

- Scalable controller platform for everything from small, simple machines to large, high-complexity applications
- Up to 64 axes of synchronized path motion, including S-curve and other complex moves
- Integrated I/O and functional safety modules
- Plug-and-play capabilities with KAS and third-party systems
- Reduced setup time, consolidated software and single-source ordering when using the full Kollmorgen Automation Suite
- Integrated tools for rapid network configuration, servo tuning and machine optimization
- Flexible programming options include PLCopen and IEC 61131-3 programming

Specification	Description
Processor	Quad-core 1.5GHz (ARM Cortex A-72 processor)
Internal Memory	8GB Flash memory
Motion Network	EtherCAT, max 4kHz update rate
Networking Protocols	2 Ethernet Ports 100BaseT connection supporting: <ul style="list-style-type: none"> <li>• EtherNet/IP</li> <li>• HTTP</li> <li>• Modbus TCP</li> <li>• PROFINET</li> <li>• TCP/IP</li> <li>• UDP</li> </ul>
Certifications	CE, RoHS, UKCA, UL
Battery	<ul style="list-style-type: none"> <li>• CR2032 Lithium Manganese Dioxide primary cell, 3V.</li> <li>• At least 190mAh.</li> </ul>
Critical Temperature Limit (CPU)	83 °C
Dimensions	174 mm (H) x 50 mm (W) x 111.5 mm (D)
External Memory	Removable USB flash drive slot. USB flash drive not included.
High Temperature Limit (CPU)	78 °C
Input Power	24VDC @ 1.25A
Local I/O	6 digital inputs 2 digital outputs
Operating Temperature (ambient range)	0 °C to 55 °C
Sealing	IP20



## Servo motors and drives

As an integral part of Kollmorgen motion systems, KAS harnesses the full performance potential of our leading servo motors and perfectly matched drives. It also supports a wide range of servo and stepper motors, drive slices, modular and LVDC options to provide proven motion control performance. Unified setup through Workbench within the KAS IDE platform simplifies configuration and tuning, while SafeMotion built-in functional safety (including FSoE) eliminates the need for external solutions and integration complexity. This combination delivers unrivaled power density, control and ease.



## Where KAS excels

KAS is designed for the real-world needs of industrial automation applications across a broad range of markets. It delivers the precision, reliability and performance required to keep production running at its best. All backed by Kollmorgen's engineering expertise, application knowledge, global support and proven technology.



### Aerospace & Defense

- Test stands
- Actuation
- Simulators



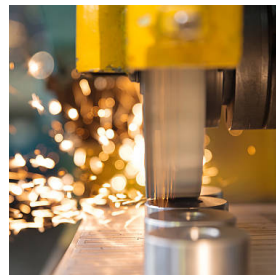
### Food & Beverage

- Filling
- Portioning
- Packaging



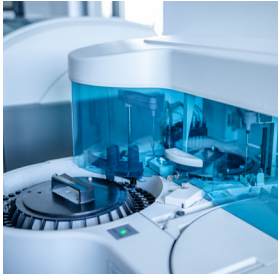
### Agriculture

- Sorting
- Cutting
- Conveying



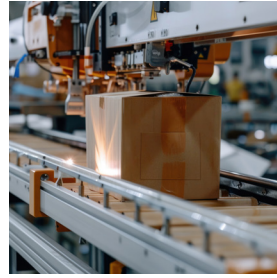
### Metal Forming

- Presses
- Roll forming
- Cutting



## Medical and Laboratory Automation

- Diagnostics
- Sample handling



## Packaging & Converting

- Form/fill/seal
- Labeling
- Slitting



## Medical Imaging

- CT/MRI/X-ray motion



## Pharmaceutical

- Filling
- Dosing
- Packaging



## Machine Tools

- Machining
- Spindle
- Tool handling



## Postal & Parcel Sorting

- Sorting
- Routing
- Conveyors



## Mining & Construction

- Drilling
- Heavy positioning



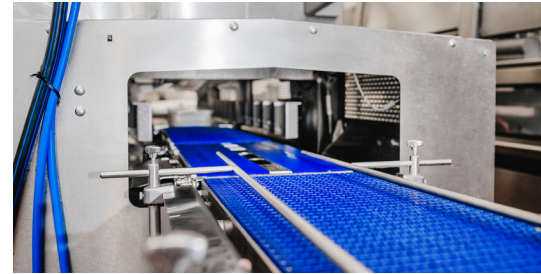
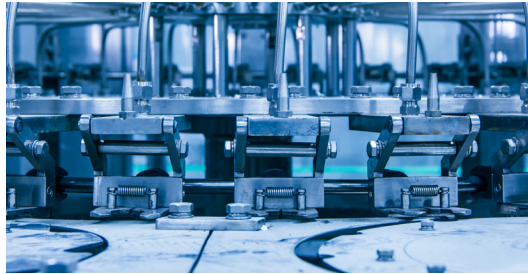
## Printing

- Flexographic
- Gravure
- Digital



## Oil & Gas

- Inspection
- Metering
- Analysis



## About Kollmorgen

Kollmorgen, a Regal Rexnord Brand, has more than 100 years of motion experience, proven in the industry's highest-performing, most reliable motors, drives, AGV control solutions and automation platforms. We deliver breakthrough solutions that are unmatched in performance, reliability and ease of use, giving machine builders an irrefutable marketplace advantage.

[www.kollmorgen.com](http://www.kollmorgen.com)

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