Product Release Notice
KINGSTAR 4.5.3

General Availability Release Date

July 28, 2025

Product Overview

KINGSTAR is an all-software, complete "plug-and-play" PC-based Machine Automation platform for IoT and Industry 4.0. Key pre-tested and pre-integrated industrial machine components include software-based motion control, machine vision, programmable logic controller (PLC) and the industry's only plug-and-play EtherCAT master that auto-discovers any vendor's EtherCAT drive, IO or device and auto-configures the EtherCAT environment at startup. Built on the EtherCAT standard and supported by a real-time 64-bit Windows operating-system (RTOS) from IntervalZero, KINGSTAR empowers engineers to design, develop and integrate machine control applications or a system of controllers on a single Industrial PC. The KINGSTAR platform can replace all hardware with software-only motion controllers and machine vision positioning systems quickly and cost-effectively.

KINGSTAR version 4.5.3 allows developers to select only the functionality they need. KINGSTAR's flexibility is provided through feature packages that allow you to grow your product at any time by adding functionality to the existing KINGSTAR Runtime.

KINGSTAR Runtime feature packages:

- Core packages for: 1, 2, 3 or 7 KINGSTAR cores
- Motion Packages for: Point to Point, Synchronization, Blending, and Kinematics
- Axis Packages for: 8, 16, 32 or unlimited axis
- High Speed Timer
- Multiple Masters
- Hot Connect
- Cable Redundancy
- Programmable Logic Controller (PLC)

Updates

- Includes the latest version of IntervalZero's RTX64 4.5.3

    - Resolves an incompatibility with Windows 11 24H2 OS Builds 26100.3915 Preview and 26100.4061.
    - Resolves an issue where **fopen** failed to directly access a device when passed \\Device\
    - Resolves a compatibility issue with Intel® Core™ i5-12500E Processor systems running Windows 11.
    - Modified RTX64 driver and INF installation to comply with Microsoft's updated attestation signing requirements.

- Added support for the PdoGroup tag in the ESI parser for the Remote I/O R8 Series. [KS-5745]

Issues Resolved

- KINGSTAR Tools:

    - Resolves an issue where Analysis Console did not export messages when the last used drive had been removed. [KS-5744]
    - Resolves an issue where the .NET Framework configuration file caused exceptions in the ESI Import Tool, Configuration Tool, and Scope. [KS-5748]
    - Resolves an issue where the values of **PDO increment** and **Index increment** were incorrect on the **Process Data** tab of the ESI Import Tool after importing ESI files into the User Devices Database. [KS-5746]

- KINGSTAR PLC:

    - Resolves an issue where COM_Ethercat in COM_Connect failed to execute. [KS-5735]

Availability

KINGSTAR 4.5.3 is available beginning July 28, 2025 through Partners and by contacting Sales: sales@intervalzero.com.

We look forward to any comments and feedback. If you have any recommendations, or wish to suggest any product enhancements, please contact Product Management at: productmanagement@intervalzero.com.