

KINGSTAR 3.4

SOFT MOTION RELEASE NOTES

KS-DOC-X64-0015-R16

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KINGSTAR Soft Motion 3.4 release notes

New features

The following new features and improvements are available in this release:

NOTE: Reference numbers, [KS-<XXX>], are for internal tracking purposes.

- Add new supported hardware:
 - EtherCAT I/O modules
 - DECOWELL EC-HH00-C1NN [KS-720]
 - EtherCAT couplers
 - Balluff BNI0077 IO-Link master [KS-700]
 - Beckhoff EL6224 IO-Link terminal [KS-697]
 - Beckhoff EL6751 CANopen master terminal [KS-474]
 - Beckhoff EL7041-1000 stepper drive [KS-532]
 - Beckhoff EP6224 IO-Link master [KS-698]
 - Beckhoff EP6228 IO-Link master [KS-699]
 - Phoenix Contact AXL E EC IOL8 DI4 M12 6P IO-Link master [KS-701]
- Support IO-Link master devices. [KS-343]
- Integrate IO-Link components into KINGSTAR: **Structures** > **IoLinkSetting**. [KS-466]
- Support CANopen: **Structures** > **CanOpenSetting**, **CanPdo**. [KS-582]
- Add ADS over EtherCAT: **Mailbox** > **AoeReadCommand**, **AoeReadSdoObject**, **AoeReadWriteCommand**, **AoeWriteCommand**, **AoeWriteControlCommand**, **AoeWriteSdoObject**. [KS-639]

- Allow manual setting of linked device: **EtherCAT Link** > **ConfigLinkedDevice**. **Structures** > **EcatMdpSetting**, **SdoCommand.Types** > **CouplerProtocol**. [KS-674]
- Add CANopen and IO-Link explanation in **Concepts**.

Updates

- Add timing diagrams to **MC_Inch** and **MC_Jog**. [KS-656]
- Remove axis availability protection from **MC_AddAxisToGroup**. When an axis is added to a group, **MC_AddAxisToGroup** doesn't check its availability, which will be checked in **MC_GroupEnable**. [KS-712]
- Add null parameter protection to **GetLinkStatus**. If the user gives the null parameter, the **ReturnCode** will be **returnWrongParam**. [KS-718]
- Improve I/O read and write protections to ensure data can be correctly read and written. [KS-733]
- Support RTX64 3.3 Update 2. [KS-739]

Fixes

- In the .NET API interface, **GearIn**, **GearInPos** and **MoveVelocity** link to the wrong functions in the motion library. [KS-672]
- In the .NET API interface, **SetEoeIp** links to the wrong function in the motion library. This causes the issue using the **SetEoeIpAsync** method in the **Module** class. [KS-673]
- In the .NET Class interface, **PulseHeartbeatAsync** links to the wrong function in the motion library. [KS-677]
- In the Win32 interface, **SetSlaveEoeIp** terminates application. [KS-680]
- **MC_ReadAxisError** doesn't return axis error code when a software following error occurred. [KS-684]
- Commands are not aborted when the drive emergency stop is triggered. [KS-686]

- **MC_ReadBoolParameter** is unable to read the values of **mcKiStoppedOnly** and **mcKdUseInternalPos**. [KS-691]
- In the Win32 interface, **MC_WriteBoolParameter** doesn't take FALSE as its **Value**. [KS-704]
- Allow buffer mode to be continuously updated in group motion. [KS-707]
- The axis' availability is not changed after it is removed from a group. [KS-709]
- If an axis group is enabled but the axes it contains has already been used in other group, an error occurred. The **ErrorID** of this error is wrong. The correct **ErrorID** should be **mcWrongEnvironment**. [KS-711]
- In .NET Class Sample, **JogForward** and **JogBackward** are not reset after jog motion is failed. [KS-715]
- In NetApiInterface Sample, the positive and negative moving directions are the same. [KS-716]
- Forbid **MotionProfileType** change while the axis is moving. [KS-731]
- Calling Halt or Stop during deceleration overshoots the target. [KS-741]
- Halt and Stop doesn't take moving direction into account. Halting or stopping a backward moving axis causes forward decelerating motion. [KS-751]
- Read SDO does not return any data if the device data length exceeds the requested length. [KS-752]

Known issues

- If you click **Start/Stop KINGSTAR PLC** in KINGSTAR Soft PLC Runtime when ISaGRAF PLC Workbench is debugging in **Online** mode, the computer may crash. The workaround is stopping debugging first, and then click **Start/Stop KINGSTAR PLC**. [KS-390]
- Calling group's Halt or Stop during deceleration overshoots the target. [KS-755]

- ISaGRAF PLC Workbench needs internet connection to install Microsoft .NET Framework 4.5.1.
- Windows 10 Spring Creators Update is not compatible with RTX64 3.3 Update 2, which is included in KINGSTAR 3.4. If you install KINGSTAR 3.4 on Windows 10 Spring Creators Update, some errors may occur during installation or at run time.

Get support

KINGSTAR offers a number of support options for KINGSTAR users, including third-party, online and phone support.

Third-party support

If you are a customer who purchased a KINGSTAR product through a third-party reseller, contact the reseller for support.

Online support

The KINGSTAR Customer Support web page is located at:

<http://kingstar.com/support/>

The KINGSTAR support web pages provide electronic access to the latest product releases, documentation, and release notes. You can access the online support ticketing system to submit issues or questions.

Before calling technical support

Please have the following information ready before calling KINGSTAR Technical Support:

The version number of your RTX64 and KINGSTAR software

To obtain the RTX64 version number:

1. Click **Start > All Programs > RTX64 3.4 Runtime > Control Panel**.
2. In the **RTX64 3.4 Control Panel**, record **Version** shown in the **Runtime Information** area.

To obtain the KINGSTAR version number:

1. Click **Start > All Programs > KINGSTAR > Runtime**.
2. In **Windows Explorer**, click the `ksm64.rtdll` file, and right-click the same file again.
3. On the shortcut menu, click **Properties**.

4. In the **ksm64.rtdll Properties** window, click the **Details** tab, and record **Product version**.

Phone support

For technical support related to installing and using KINGSTAR, please call technical support at this number:

+886-2-2556-8117

Hours are Monday-Friday from 9:30 to 18:30, UTC+08:00, excluding holidays.