# KINGSTAR 3.7

## FIELDBUS RELEASE NOTES

KS-DOC-X64-0014-R21

IntervalZero

KINGSTAR IntervalZero

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# KINGSTAR Fieldbus 3.7 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:
  - Servo drives
    - ACS Motion Control IDM [KS-1474]
    - Axor Mack Uninano (MKUN) series [KS-1677]
    - Baumueller b maXX 2500 [KS-1475]
    - Baumueller b maXX 5500 [KS-213]
    - Etel AccurET 400 [KS-1476]
    - HDT NTT 240/460 [KS-1611]
    - Kinco FD3 [KS-1388]
    - Maxon Motor EPOS4 70/15 [KS-1478]
    - Metronix BL 4102-C [KS-1479]
    - Sanyo Denki RS3 3E [KS-1196]
    - Schneider Electric Lexium 28E and BCH2 [KS-1568]
    - TPM SVR-K111 [KS-1537]
    - Wittenstein cyber simco [KS-1298]
    - XINJE-DS5-C [KS-1618]
    - YAKO MS-MINI3E [KS-1619]

- Stepper drives
  - Applied Motion Products STF-EC [KS-1666]
  - Kinco FM880 [KS-1188]
  - MOONS' SSDC06-EC [KS-1254]
  - Servotronix stepIM [KS-1482]
  - TPM STP-K121B [KS-1207]
- EtherCAT I/O modules
  - Beckhoff EK1110 extension [KS-1389]
  - Beckhoff EL5042 2-channel BiSS-C interface [KS-693]
  - Beckhoff EL6695 bridge terminal [KS-934]
  - Beckhoff EL7342 EtherCAT terminal [KS-1156]
  - Berghof ECC I/O modules [KS-1299]
  - Berghof E I/O modules [KS-1300]
  - Brunner GER1085 I/O module [KS-1699]
  - Kuhnke Ventura Fast IO (VFIO) [KS-1653]
  - Omron NX-EC203 series [KS-1638]
- EtherCAT couplers
  - Festo CPX-AP-I-EC-M12 [KS-1477]
  - ICPDAS ECAT-2093 [KS-1446]
- Others
  - Advantech AMAX-3285IO slave module [KS-1579]
  - Nexcom AXE-5904 EtherCAT slave module [KS-1206]
  - Omron 3G3AX-MX2-ECT inverter [KS-1297]

    - Omron GX-JC03 / JC06 junction slave [KS-1672]
    - Panasonic SC-HG1-ETC communication unit [KS-1480]
    - Ropex RES-5012, UPT-6012 temperature controllers [KS-1481]
    - TPM 207-ADIO-KIT [KS-1209]
    - TPM 207-D402H [KS-1208]
- Add **RtEcatSetDcMasterShift** to support the reference clock for Master Shift. [KS-1164]
- Add the Touch probe page in Concept. [KS-1306]
- Add **RtEcatSetDcCheck** to allow users to disable DC checks during the startup of KINGSTAR Subsystem. [KS-1500]
- Allow users to select a different ESI file for the same device. See the CouplerProtocol type. [KS-1664]

# Updates

- Handle profile operation modes in auto-configuration. [KS-785]
- Support RTX64 3.7. [KS-1347]
- Update the list of network interface cards. Only the cards that are workable and stable are kept in the list. [KS-1379]
- Allow multiple applications to run using the EtherCAT interface. [KS-1439]
- Reduce the Write MOP lines in the log when MOP is enabled (**RtEcatSetMOP** is enabled) but fails. [KS-1465]
- Increase the timeout of FoE because firmware download may take 2 minutes. [KS-1468]
- When the Following Error bit of the servo drive is TRUE, KINGSTAR is sending a warning instead of an alarm. The axis can keep working without being interrupted by the alarm. [KS-1503]

- The SDO error log in KINGSTAR Analysis Console can now display the error name. The failing object will be displayed if KINGSTAR Fieldbus can't start due to CoE init. [KS-1645]
- KINGSTAR EtherCAT is now renamed KINGSTAR Fieldbus. [KS-1656]

## Fixes

- An RTX64 exception occurs if the FoE local path doesn't exist. [KS-1076]
- **RtEcatRestartSlave** may not be able to switch SanyoDenki RS2-H back to the Op state. [KS-1168]
- The incorrect error message is displayed when the network card isn't configured. [KS-1247]
- Baud is not editable in Beckhoff EL6751 CANopen. [KS-1307]
- The new sensor settings should only be applied when the sensor exists in the PDO. [KS-1316]
- The data for SDO segmented upload is incorrect. [KS-1366]
- The delay of the Explicit ID reading is misplaced so the reading fails on slower slaves. [KS-1462]
- The PDO assignment of an I/O module doesn't detect and handle the complete access flags. [KS-1463]
- The PDO assignment of an I/O module and Modular Device Profile (MDP) logic generate Init commands and they conflict with each other. PDO assignment shouldn't generate these commands for MDP devices. [KS-1464]
- Simulated axes don't move well in the faster EtherCAT cycles. [KS-1495]

- KINGSTAR will crash during the distributed clock (DC) calculation if all of these happen:
  1. The coupler doesn't support DC.
  2. No device before the coupler (connected to the RJ45 IN port of the coupler) supports DC.
  3. One of the devices behind the coupler (connected to the E-bus port of the coupler) supports DC.
  4. One of the devices on the coupler's RJ45 network (connected to the RJ45 OUT port of the coupler) supports DC.

  If no device before the coupler supports DC, KINGSTAR uses the coupler's distributed clock (DC) as the reference clock. If the coupler doesn't support DC, it uses the device's DC behind the coupler instead, but the device on the coupler's RJ45 network can't find this DC, so KINGSTAR crashes. [KS-1573]

- Passwords can't be used with the FoE functions. [KS-1676]

# 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** > **RTX64 3.7 Runtime** > **Control Panel**.
2. In the **RTX64 3.7 Control Panel**, record **Version** shown in the **Runtime Information** area.

To obtain the KINGSTAR version number:

1. In **Windows Explorer**, browse to `C:\Program Files\IntervalZero\KINGSTAR\bin`.
2. click the `coe64ks.rtdll` file, and right-click the same file again.

3. On the shortcut menu, click **Properties**.
4. In the **coe64ks.rtdll Properties** dialog box, 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 17:30, UTC+08:00, excluding holidays.