

KINGSTAR 3.8

SUPPORTED HARDWARE

KS-DOC-x64-0001-R21

IntervalZero



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Servo drives

Device	Information
ABB MicroFlex e190	https://new.abb.com/drives/low-voltage-ac/motion/microflex-e190
ACS Motion Control IDM	https://www.acsmotioncontrol.com/
Axor Mack Uninano (MKUN) series	https://www.axorindustries.com/en/products/mack-uninano/
Baumuelller b maXX 2500	https://bit.ly/2VEuCYV
Baumuelller b maXX 5500	https://bit.ly/2YTUN4S
Beckhoff EL7201-0011	https://www.beckhoff.com/english.asp?ethercat/el7201.htm
CoolDrive A8	http://bit.ly/2nbHKX9 (Simplified Chinese)
Copley Accelnet	http://bit.ly/2o2Ckvq
Copley Stepnet	http://bit.ly/2mqUtqx
Copley Xenus	http://bit.ly/2nzxcCk
Delta ASDA-2	http://bit.ly/2n5J3FC
Elmo Gold	http://www.elmomc.com/products/gold-digital-servo-drives-main.htm
ESTUN ProNet-EC	http://en.estun.com/ProductClass.aspx?id=554
ESTUN ProNet Summa ED3S ¹	http://en.estun.com/ProductClass.aspx?id=554

Device	Information
Etel AccurET 400	https://www.etel.ch/motion-control/accuret-modular/
Faulhaber Motion Controllers Series 5004	https://www.faulhaber.com/en/products/series/mc-5004-p/
Faulhaber Motion Controllers Series 5005	https://www.faulhaber.com/en/products/series/mc-5005-s/
Faulhaber Motion Controllers Series 5010	https://www.faulhaber.com/en/products/series/mc-5010-s/
Faulhaber Motion Control Systems Series MCS	http://bit.ly/2nQ8XgB
Festo CMMP-AS-C2-3A-M3	https://bit.ly/2jAqN67
Festo CMMT-AS-M3	https://www.festo.com/
Festo EMCA	https://www.festo.com/cms/nl-be_be/60236.htm
Fuji ALPHA5 Series	http://www.fujielectric.com/products/servo/alpha5/
Han's Robot D-Module Series Modular	http://en.hansmotor.com/hansagvrobot/162-198.html
HDT NTT 240/460	http://www.hdtlovato.com/
Hiwin D1/D1-N/D2 Rev4	https://www.hiwinmikro.tw/en/product/controller-drive
Inovance IS620N	http://www.inovance.cn/content/details124_12890.html (Simplified Chinese)
*ITRI Drive 16bit	https://www.itri.org.tw/eng/

Device	Information
KEB COMBIVERT F6-K	http://keblog.com/f6k-ethercat-sto-vfd/
Kinco FD3	https://en.kinco.cn/product/servo
Kollmorgen AKD EtherCAT Drive	http://www.kollmorgen.com/en-us/products/drives/servo/akd/
LS Mecapion L7N	http://www.lsmecapion.com/eng/contents/sub01/sub01_02.php
Maxon Motor EPOS4 70/15	https://www.maxonmotor.com/maxon/view/content/epos-detailsite
Maxon Motor Maxpos	https://www.maxonmotor.com/maxon/view/content/MAXPOS-Detailsite
Metronix BL 4102-C	https://bit.ly/2Wmgact
Mitsubishi MR-J4-TM	http://bit.ly/2nApE22
*Newport XPS-RL Series	http://bit.ly/2q34U02
Omron G5	http://www.ia.omron.com/products/family/2644/
Panasonic Minas A5 Series	https://bit.ly/2CY5VBx
Panasonic Minas A6 Series	http://bit.ly/2q2zwiv
Phase AXM II	http://www.phase.eu/axm-ii/
RS Automation CSD7_01BN1	https://bit.ly/2RsiXuk (Korean)
Sanyo Denki RF2 ²	http://www.sanyodenki.eu/Multi-Axis-Servo-Amplifier-with.html
Sanyo Denki RS2	http://bit.ly/2nK30Ay

Device	Information
Sanyo Denki RS2H	http://bit.ly/2nK30Ay
Sanyo Denki RS3 3E	https://bit.ly/2FovbBu
Schneider Electric Lexium 28E and BCH2	https://bit.ly/2xPoEec
Servotronics CDHD	http://servotronics.com/products/cdhd-servo-drives/
Shihlin Electric SDP-E	http://www.seec.com.tw/en/product/product_list.asp?pno=169
Sinamics S120 via Robox module	https://sie.ag/2trx4pv http://www.robox.it/en-US/showcateg.php?idcap=IO.P
TDE OPDE	http://www.tdemacno.com/en/32.9-02-OPDE.html
Teco JSDG2	http://globalsa.teco.com.tw/products_series.aspx?KindID=1&ID=4
TPM SVR-K111	http://www.tpm-pac.com/SVR-K111
TPM SVR-K112	http://www.tpm-pac.com/SVR-K112
TQ Systems SDB-40-100	http://bit.ly/2rkTNV1
TSV-HL	Website is unavailable.
Wittenstein cyber simco	https://bit.ly/2HNpkFp
XINJE-DS5-C	http://www.xinje.com/xj_product/show-3831.html (Simplified Chinese)
YAKO MS-Mini3E	https://bit.ly/2LazBNw (Simplified Chinese)
Yaskawa Sigma-5	http://bit.ly/2mO3YLF
Yaskawa Sigma-7	http://bit.ly/2mqOEch

¹ Supports only Profile Velocity (PV), Profile Position (PP), Cyclic Synchronous Position (CSP).

² Four axes.

*Yet to be tested.

Stepper drives

Device	Information
Applied Motion Products SS05-EC-D	https://www.applied-motion.com/products/steper servo-drives/ss05-ec-d
Applied Motion Products STF-EC	https://www.applied-motion.com/products/series/stf-stepper-drives
Beckhoff EL7031	http://www.beckhoff.com/english.asp?ethercat/el7031.htm
Beckhoff EL7041 EL7041-1000	https://www.beckhoff.com/english.asp?ethercat/el7041.htm
Beckhoff EL7047	http://www.beckhoff.com/english.asp?ethercat/el7047.htm This stepper drive doesn't support position modes.
Delta R1-EC5621	http://www.deltaww.com/default.aspx?hl=en-US
Fastech Ezi-SERVO II EtherCAT	http://fastech.co.kr/new/board/bbs/board.php?bo_table=sub010207_en
Fastech Ezi-SERVO II 4X EtherCAT	https://fastech.co.kr/new/eng/sub0102-1001.php
Fastech Ezi-Step II	https://fastech.co.kr/new/eng/sub0105-0701.php
Kinco FM880	https://bit.ly/2ZBMTJI
Leadshine DM3E-556	http://www.leisai.com/cn/cpzx/index_36_lcid_327_lcid_22_cid_269.html (Simplified Chinese)
Leadshine DM3E-870	http://www.leisai.com/cn/cpzx/index_36_lcid_328_lcid_22.html (Simplified Chinese)
MOONS' SSDC06-EC	https://bit.ly/2GWyL6y (Simplified Chinese)

Device	Information
MOONS' STF06-EC	https://bit.ly/2E3sdjs (Simplified Chinese)
Oriental Motor AZD2A-KED	https://bit.ly/2QeDeEw
Oriental Motor AZD3A-KED	https://bit.ly/30uU86p
Oriental Motor AZD4A-KED	https://bit.ly/2Ht9UXV
SANMOTION Model No.PB	https://bit.ly/2EgWnkc
Servotronix stepIM	http://www.servotronix.com/product/stepim-integrated-closed-loop-steppers/
TPM STP-K121-KIT	http://www.tpm-pac.com/stp-k121
TPM STP-K121B	http://www.tpm-pac.com/stp-k121

EtherCAT I/O modules

Device	Information
Advantech ADAM-5000 series	http://bit.ly/2pwH2SI
Advantech AMAX-4800 series	http://bit.ly/2iX4yLg
Beckhoff EK1110 extension	https://www.beckhoff.com/EK1110/
Beckhoff EK1122 junction	https://www.beckhoff.com/EK1122/
Beckhoff EL1xxx	http://bit.ly/2oqx99V
Beckhoff EL2xxx	http://bit.ly/2o8hKKs
Beckhoff EL30xx Beckhoff EL31xx Beckhoff EL32xx	http://bit.ly/1xmoi5c
Beckhoff EL3751	https://www.beckhoff.com/EL3751/
Beckhoff EL4xxx	http://bit.ly/2pwsbb0
Beckhoff EL5xxx	http://bit.ly/2o9DMf9
Beckhoff EL6001 serial interface RS232	https://bit.ly/2N5W6XT
Beckhoff EL6021 serial interface RS422/RS485	https://bit.ly/2x7SNFA
Beckhoff EL6695 bridge terminal	https://www.beckhoff.com/english.asp?ethercat/el6695.htm

Device	Information
Beckhoff EL7342 EtherCAT terminal	https://bit.ly/2A9W6O1
Beckhoff EL9xxx	http://bit.ly/2p9t1hf
Beckhoff BK1120	https://bit.ly/2xbZVQu
Berghof ECC I/O modules	https://bit.ly/2JvuZml
Berghof E I/O modules	https://bit.ly/2JvuZml
Brunner GER1085 I/O module	https://www.brunner-innovation.swiss/product/ethercat-io/ module
DECOWELL EC-HH00- C1NN	http://www.wellinkio.com/product/50.html (Simplified Chinese)
Fastech Ezi-IO ¹	https://fastech.co.kr/new/eng/sub0111.php
ICPDAS ECAT-2045	http://bit.ly/2pwrRsV
ICPDAS ECAT-2050	http://bit.ly/2o83kdm
ICPDAS ECAT-2051	http://bit.ly/2oBXbZQ
ICPDAS ECAT-2052	http://bit.ly/2o9wMyU
ICPDAS ECAT-2053	http://bit.ly/2o9LMfU
ICPDAS ECAT-2055	http://bit.ly/2o9K3HE
ICPDAS ECAT-2055-32	https://bit.ly/2DYDgvW
ICPDAS ECAT-2060	http://bit.ly/2pwrIFl
Kuhnke Ventura Fast IO (VFIO)	https://bit.ly/2lXs5wt
Nexcom AXE9200	https://bit.ly/2SU2S2t

Device	Information
Nexcom NEIO-B1811/B1812	https://bit.ly/2KdQW7L
Omron GX Remote I/O terminals	http://bit.ly/2oCbjlY
Prima C-101	http://bit.ly/2o9GFwv
Prima C-201	http://bit.ly/2o9GFwv
Prima E-101	http://bit.ly/2o9GFwv
Prima E-201	http://bit.ly/2o9GFwv
R-IN32M3	http://bit.ly/2pwIRPG
Syn-Tek ESC 6012	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek ESC 70E2	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC5500	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC5512	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC6002	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC6022	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC6032	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC7062	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC8124	http://www.deltaww.com/default.aspx?hl=en-US
Syn-Tek R1-EC9144	http://www.deltaww.com/default.aspx?hl=en-US

¹ When Fastech Ezi-IO is not the first device on the EtherCAT bus, it has a connection problem.

EtherCAT couplers

EtherCAT couplers can be connected to different modules, but only the coupler itself has the EtherCAT capability. These modules don't have the clock synchronization and their polling is slow.

Balluff

Coupler	Information
BNI0077 IO-Link master	https://tinyurl.com/yb8lmtvt

Beckhoff

Coupler	Information
EK1100 EtherCAT coupler	https://www.beckhoff.com/english.asp?EtherCAT/ek1100.htm
EL6224 IO-Link terminal	https://www.beckhoff.com/english.asp?ethercat/el6224.htm
EL6751 CANopen master terminal	https://www.beckhoff.com/english.asp?ethercat/el6751.htm
EP6224 IO-Link master	https://www.beckhoff.com/english.asp?fieldbus_box/ep6224.htm
EP6228 IO-Link master	https://www.beckhoff.com/english.asp?fieldbus_box/ep6228.htm

ICPDAS

Coupler	Information
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ICPDAS ECAT-2093 Three-
Channel Incremental Encoder
Counter

<https://bit.ly/2EbqCJh>

Friedrich Lütze

Coupler	Information
LCOS-BC-PN	http://bit.ly/2rxlg24

Festo

Coupler	Information
CPX-AP-I-EC-M12	https://bit.ly/30I0gbp

ICPDAS

Coupler	Information
ECAT-2093	https://bit.ly/2EbqCJh

National Instrument

Coupler	Information
NI-9144, NI-9145 CompactRIO Chassis	https://www.ni.com/en-us/support/model.ni-9144.html https://www.ni.com/en-us/support/model.ni-9145.html

Omron

Coupler	Information
Omron NX-ECC203 series	https://industrial.omron.eu/en/products/NX-ECC203

PHOENIX CONTACT

Coupler	Information
AXL E EC IOL8 DI4 M12 6P	http://bit.ly/2nHBG80
Bus Coupler - AXL F BK EC	http://bit.ly/29xnbuh
IL EC BK-PAC	http://bit.ly/2rkJa10 (Simplified Chinese)

VIPA

Coupler	Information
VIPA SLIO EtherCAT Coupler	http://www.vipa.com/en/products/io-systems/slio/

WAGO

Coupler	Information
750-354 EtherCAT Fieldbus Coupler	http://bit.ly/2h4vDcu

Weidmüller

Coupler	Information
UR20-4DI-P	http://bit.ly/2rkBT4X

UR20-FBC-EC

<http://bit.ly/2qxTtkz>

UR67-MP-78-8DIDO-12-60M

<http://bit.ly/2pZpVd8>

Others

Device	Information
Adaptive Robot Gripper 2-Finger	http://robotiq.com/products/adaptive-robot-gripper/
Advantech AMAX-3285IO slave module ¹	https://bit.ly/2T6NX5i
CKD OPP6 Series	http://www.ckd.co.jp/english/
dieEntwickler RapidoScan	https://www.rapidoscan.com/
Hitachi EH IOCA	http://www.hitachi.com/
*Hilscher CIFX RE/ECS	https://www.hilscher.com/products/product-groups/pc-cards/
Inovance AM600	https://bit.ly/2JI53WM (Simplified Chinese)
Interface PCI-450601	http://www.interface.co.jp/catalog/prdc.asp?name=pci-450601
ITRI PIC32 Slaves	https://www.itri.org.tw/eng/
Kashiyama ECAT01	https://www.kashiyama.com/en/
Omron 3G3AX-MX2-ECT inverter	https://bit.ly/2wcJOCb
Omron GX-JC03 / JC06 junction slave	http://www.ia.omron.com/products/family/3079/
Leuze bar code scanner BCL 338i	http://bit.ly/2qxSctU
Nagano Oki NOKECW R-IN32M3-EC	http://www.naganooki.co.jp/ems_s/sekkei/ether.html (Japanese)

Device	Information
Nexcom AXE-5904 EtherCAT slave module ²	https://bit.ly/2yoWKGf
Panasonic SC-HG1-ETC EtherCAT communication unit	https://bit.ly/30sOphm
Ricoh AP-10A	https://industry.ricoh.com/industrial-pc/AP-10A/ (Japanese)
Ropex RES-5012 temperature controller	https://ropex.de/en/products/temperature-controllers/resistron.html
Ropex UPT-6012 temperature controller	https://ropex.de/en/products/temperature-controllers/cirus.html
Tem-Tech Lab. ECG-485	https://www.tem-tech.co.jp/en/products/
Toshiba 4-axis SCARA robot controllers TS3000, TSL3000	https://bit.ly/2C6l4Os (TS3000) https://bit.ly/2C5bM6D (TSL3000)
TPM 207-D240-NX, 207-D204-XN 207-D222-NN, 207-A202F, 207-A202FH, 207-A203F, 207-A204F, 207-A220FID, 207-A220FD	http://www.tpm-pac.com/plug-in_modules
TPM 207-ADIO-KIT	http://www.tpm-pac.com/207-adio-kit
TPM 207-D402H	http://www.tpm-pac.com/207-d402-xn_xp

¹This device works with KINGSTAR but has had limited testing and users should contact Advantech for information on how to set up the device and develop the custom cable.

²Tested with YASKAWA SDGV-R90A01B and Panasonic MADKT1505CA1. These two devices may not work properly when their homing modes are used.

*Yet to be tested.

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 3.7.1 Runtime > Control Panel**.
2. In the **RTX64 3.7.1 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 file, and right-click the same file again.

3. On the shortcut menu, click **Properties**.
4. In the 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.