

Firmware change-log of new features and bug fixes of the u-remote field bus coupler: 1334910000 UR20-FBC-EC

Firmware updating Information:

An update of the firmware can be done via the embedded web server. A description of the firmware update can be found in the u-remote web server manual on the Weidmüller website: www.weidmueller.com

Version 02.05.00	Hardware Version 02.xx.xx	Release date: July, 2025
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New supported modules:

- 2819690000 - UR20-4COM-IO-LINK-V2
- 3096630000 - SAI-AU-M8-SB-8DO-2A-V2
- 3096500000 - SAI-AU-M8-SB-8DI-V2
- 3096510000 - SAI-AU-M8-SB-8DIO-V2
- 3096490000 - SAI-AU-M12-SB-8DO-2A-V2
- 3096470000 - SAI-AU-M12-SB-8DI-V2
- 3096480000 - SAI-AU-M12-SB-8DIO-V2

Version 02.04.00	Hardware Version 02.xx.xx	Release date: February, 2025
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New features:

- Improved hot swap properties - requires UR20-AUX-VSYS as last module on the station

Version 02.03.00	Hardware Version 02.xx.xx	Release date: October, 2024
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New supported modules:

- 2920830000 - UR20-3EM-400V-AC-CT1A
- 2920840000 - UR20-3EM-400V-AC-CT5A
- 2920850000 - UR20-3EM-400V-AC-RC
- 2920860000 - UR20-3EM-400V-AC-333MV
- 2489840000 - UR20-1COM-CAN

Bug fixes:

- Emergency protocol is fully implemented for diagnosis and process alarm
- Parameter "I/O data of station synchronous" is writable only in PREOP
- Substitute values are correctly assignable via WebApp
- Updated coupler diagnosis history: Added "Communication Fault" diagnosis
- Input process data set to "0" for applications with power feed modules in case the module is powered off
- WebApp: Fixed display of substitute values for UR20-2PWM-I-2.5A-2DI-P

Version 02.02.00	Hardware Version 02.xx.xx	Release date: November, 2023
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New supported modules:

- 2489840000 - UR20-1COM-CANOPEN
- 2828350000 - UR20-4AI-I-HART-ISO-16

Version 02.01.00	Hardware Version 02.xx.xx	Release date: August, 2022
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New supported modules:

- 2697910000 - UR20-2PWM-I-2.5A-2DI-P

Version 02.00.02	Hardware Version 02.xx.xx	Release date: December, 2021
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New supported modules:

- 2826800000 - UR20-1COM-232-485-422-V2

New features:

- FoE supports download of multiple files in a zip archive
- After starting web server's Force Mode, force state of DOs can directly be set to 'off' (previously only 'on' was available)
- New file manager for import and export of multiple files in web application

Bug Fixes:

- Firmware update via FoE now works for the UR20-1COM-SAI-PRO
- Fixed that analogue output values could become 0 when maximum value is forced via webserver

Caution:

- This firmware requires “u-mation Device Configurator” ≥ version 1.3.1

Version 01.12.00 Hardware Version 02.xx.xx Release date: March, 2020

New supported modules:

- 2566960000 - UR20-4AI-UI-ISO-16-DIAG
- 2566970000 - UR20-2AO-UI-ISO-16-DIAG

New features:

- Support of IO-LINK Device Configurator file upload via acyclic services
- Coupler now accepts the restoring or importing of module parameters after new modules have been added to the end of the station, as long as the order in the area of the modules that originally existed when the parameters were saved has not changed
- Web server now offers to save and load a “Customisation file” which contains station parameters and tag names in one file

Bug Fixes:

- Module diagnoses which occurred on boot now get stored in the 0x10F3 Diag Buffer
- Coupler now resends module parameters to UR20-1SM-50W-6DI2DO-P after power cycle of the module's external power supply
- “Retrieve calibration sheet” button in web server view of UR20-2AI-SG-24-DIAG works again

Known issue:

Web server sometimes freezes after downgrade from firmware 01.12.00 until browser cache gets cleared

Version 01.11.00 Hardware Version 01.xx.xx Release date: March, 2020

New supported modules:

- 2566960000 - UR20-4AI-UI-ISO-16-DIAG
- 2566970000 - UR20-2AO-UI-ISO-16-DIAG

New features:

- Support of IO-LINK Device Configurator file upload via acyclic services
- Coupler now accepts the restoring or importing of module parameters after new modules have been added to the end of the station, as long as the order in the area of the modules that originally existed when the parameters were saved has not changed
- Web server now offers to save and load a “Customisation file” which contains station parameters and tag names in one file

Bug Fixes:

- Module diagnoses which occurred on boot now get stored in the 0x10F3 Diag Buffer
- Coupler now resends module parameters to UR20-1SM-50W-6DI2DO-P after power cycle of the module's external power supply
- “Retrieve calibration sheet” button in web server view of UR20-2AI-SG-24-DIAG works again

Known issue:

- Web server sometimes freezes after downgrade from firmware 01.11.00 until browser cache gets cleared

Version 01.11.00 Hardware Version 02.xx.xx Release date: July, 2019

New supported modules:

- 2544660000 - UR20-4AI-UI-DIF-32-DIAG

New features:

- Name of zip file with ESI files contains name of matching firmware version
- Support of variable Process Data length for UR20-4COM-IO-LINK (installation of new ESI required)
- Support of acyclic services for UR20-4COM-IO-LINK, e.g. for download of configuration via PLC
- Web server accepts download of IO-Link configuration file during active fieldbus connection
- EULA confirmation on first start of web server
- New button in web server “Module parameters” replaces old parameter “Save module parameters”

Bug Fixes:

- Fixed that IE11 sometimes doesn't update web server after factory reset

Known issue:

- "Retrieve calibration sheet" button in web server view of UR20-2AI-SG-24-DIAG has no effect

Version 01.10.00 Hardware Version 01.xx.xx Release date: July, 2019

New supported modules:

- 2544660000 - UR20-4AI-UI-DIF-32-DIAG

New features:

- Support of variable Process Data length for UR20-4COM-IO-LINK (installation of new ESI required)
- Support of acyclic services for UR20-4COM-IO-LINK, e.g. for download of configuration via PLC
- Web server accepts download of IO-Link configuration file during active fieldbus connection
- EULA confirmation on first start of web server
- New button in web server "Module parameters" replaces old parameter "Save module parameters"

Bug Fixes:

- Fixed that IE11 sometimes doesn't update web server after factory reset

Known issue:

- "Retrieve calibration sheet" button in web server view of UR20-2AI-SG-24-DIAG has no effect

Version 01.08.00 Hardware Version 02.xx.xx Release date: July, 2018

New supported modules:

- 1315740000 - UR20-4COM-IO-LINK (requires Module Firmware version 01.02.00 or above)
- 2489830000 - UR20-1SM-50W-6DI2DO-P
- 2456530000 - UR20-8DIO-P-3W-DIAG
- 2555940000 - UR20-8AI-RTD-DIAG-2W

New features:

- Standalone configuration tool for IO-Link module is available from u-remote download site
- Service file and configuration file names now contain coupler type and serial number
- Status Bit 1 "Error bit 1" renamed to "Station pending", gets set when more than one module got pulled
- Status Bit 7 "MasterConfigError" gets set when Master doesn't generate list of configured modules (0xF050)

Bug Fixes:

- Fixed that after warm start the coupler refuses process data exchange occasionally
- Fixed data swap when writing into Configuration Data objects area 0x8nn0 subindices 6,8,10 and 11 (nn = slotnumber)
- Fixed data types of Sync Manager Parameter objects (0x1C32,0x1C33)
- Fixed that IE freezes after applying out of range parameter values occasionally

Version 01.08.00 Hardware Version 01.xx.xx Release date: July, 2018

New supported modules:

- 1315740000 - UR20-4COM-IO-LINK (requires Module Firmware version 01.02.00 or above)
- 2489830000 - UR20-1SM-50W-6DI2DO-P
- 2456530000 - UR20-8DIO-P-3W-DIAG
- 2555940000 - UR20-8AI-RTD-DIAG-2W

New features:

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- Fixed data types of Sync Manager Parameter objects (0x1C32,0x1C33)
- Fixed that IE freezes after applying out of range parameter values occasionally

Version 01.07.00 Hardware Version 02.xx.xx Release date: April, 2018

Information:

- Couplers with hardware version \geq 02.04.00 can't get downgraded below firmware version 01.07.00

Bug Fixes:

- EC station alias now stored persistently

Version 01.06.00 Caution! 2 different versions available depending on HW Release date: December 2017

- FB-EC-FULL-0007674-01_06_00-1.bsc for new hardware version 02.xx.xx

New features:

- Reset button appears automatically when changes in parameter settings require a restart to take effect
- Added display of slot numbers to list of compatible modules after selecting a firmware file in multi-update view
- Added password policy and weak password check - default username and password will remain the same
- New languages for Web Server available for download. Korean, French, Spanish, Portuguese and Italian
- Added HTTPS support and new coupler parameter 'HTTPS settings'
- Attention: To use this function please update the coupler with the additional firmware file:
- FB-EC-FSBL-0007884-01_02_00-0.bsc
- Added new CAN object 0x4010 in which all Software Item IDs of the coupler are listed

Bug Fixes:

- Fixed issue that live module unplug/replug sometimes corrupts I/O mapping
- Fixed issue that re-installation attempt of language files sometimes causes an error message

New supported modules:

- 2457250000 - UR20-4DO-ISO-4A
- 2457240000 - UR20-8DI-ISO-2W
- 2464600000 - UR20-8DI-PN-FSOE-V2 (FSOE V1 will not be longer supported)
- 2464580000 - UR20-4DI-4DO-PN-FSOE-V2 (FSOE V1 will not be longer supported)

Known issues:

- Mixed usage of FSOE V1 and FSOE V2 modules in the same project is not possible
- FB-EC-FULL-0003965-01_06_00-2.bsc for hardware version 01.xx.xx

For couplers with a firmware version below 01.00.45 please see update information of version 01.00.45!

New features:

- Reset button appears automatically when changes in parameter settings require a restart to take effect
- Added display of slot numbers to list of compatible modules after selecting a firmware file in multi-update view
- Added password policy and weak password check - default username and password will remain the same
- New languages for Web Server available for download. Korean, French, Spanish, Portuguese and Italian
- Added new CAN object 0x4010 in which all Software Item IDs of the coupler are listed

Bug Fixes:

- Fixed issue that live module unplug/replug sometimes corrupts I/O mapping
- Fixed issue that re-installation attempt of language files sometimes causes an error message

New supported modules:

- 2457250000 - UR20-4DO-ISO-4A
- 2457240000 - UR20-8DI-ISO-2W
- 2464600000 - UR20-8DI-PN-FSOE-V2 (FSOE V1 will not be longer supported)
- 2464580000 - UR20-4DI-4DO-PN-FSOE-V2 (FSOE V1 will not be longer supported)

Known issues:

- Mixed usage of FSOE V1 and FSOE V2 modules in the same project is not possible

Version 01.05.01 - Caution! 2 different versions available depending on hardware version May 17, 2017

- FB-EC-FULL-0007674-01_05_01-1.bsc for new hardware version 02.xx.xx

New features:

- Coupler parameter "Slot counting" to select if slot number enumeration starts with 0 or 1
- Coupler parameter "I/O data of station synchronous" - reduces backplane bus related time discrepancies on larger stations
- FB-EC-FULL-0003965-01_05_01-2.bsc for hardware version 01.xx.xx

For couplers with a firmware version below 01.00.45 please see update information of version 01.00.45!

Known issues:

- Slot number enumeration starts with 0 (ETG recommends starting with 1)
- Header of diagnostic message is in Motorola format (big endian - ETG recommends little endian)

- Write access to CAN objects 0x8nn0:0x06/0x08/0x0A/0x0B needs to be done in Motorola format

Bug Fixes:

- Fixed issue with outputs sometimes freeze when the IN port goes down while operated on a redundancy ring

Web Server:

- Tooltips for coupler LEDs
- Improved arrangement of module parameters and general information
- Display of raw process data next to converted physical value

New supported modules:

- 2456540000 - UR20-4AI-RTD-HP-DIAG
- 2453880000 - UR20-4AO-UI-16-M
- 2453870000 - UR20-4AO-UI-16-M-DIAG

Version 01.03.00**Release date: December 20, 2016**

For couplers with a firmware version below 01.00.45 please see update information of version 01.00.45!

Known issues:

- Slot number enumeration starts with 0 (ETG recommends starting with 1)
- Header of diagnostic message is in Motorola format (big endian - ETG recommends little endian)

New features:

- Static node address can be set via engineering software
- Module black list detection - coupler rejects incompatible modules (UR20-xxx-FSPS)

Bug Fixes:

- Web server performance increased
- Enlarged supported data size of CoE 0x8nn0/0x9nn0:0x02 "Type string", longer text won't be cut anymore
- Wording of UR20-2FCNT-200 in web server and ESI file now matches with manual

New supported modules:

- 1990070000 - UR20-2AI-SG-DIAG

Version 01.00.49**Release date: June 06, 2016**

For couplers with a firmware version below 01.00.45 please see update information of version 01.00.45!

New features:

- EoE IP address is shown in web server
- It is possible to update firmware in pre-operational state
- It is possible to update firmware of modules via EoE
- MAC addresses of USB interface is shown in web server
- New function to execute "reset to factory settings" via the field bus

Bug Fixes:

- Error in byte order for diagnose code E001 fixed
- Firmware update via EoE can be used for all modules with firmware files
- Diagnostic text ID fixed
- Diagnostic and process alarm are working in TwinCAT
- UR20-4DI-4DO-PN-FSOE: Wrong diagnosis messages in TwinCAT fixed
- EoE works in case of going back to "init" state
- After disconnecting the coupler from field bus it goes in pre-operational state
- Input status update in web server after disconnecting field bus
- Web server accepts 0.0.0.0 as gateway address
- UR20-4DO-PN-2A : showing the switching mode: "n-switching" or "p-switching" instead of "0" or "1" in the web server
- UR20-2FCNT-100 : value range for current period and present period is corrected
- UR20-4AI-TC-DIAG: value range for temperature units F and K is correct implemented

New supported modules:

- 2001670000 - UR20-4AI-R-HS-16-DIAG
- 2007420000 - UR20-3EM-230V-AC
- 1315400000 - UR20-16DI-N-PLC-INT
- 1315450000 - UR20-16DO-N-PLC-INT

Version 01.00.45**Release date: February 02, 2016**

Attention:

- Coupler firmware versions $\leq 01.00.45$ need to be updated in two steps.
(See separate PDF document: "Application Note Firmwareupdate UR20 coupler").

New features:

- New module classes added for "Functional and Safety" in the ESI file.
- New coupler parameter "Force Lock" implemented. With this parameter the force mode can be blocked by the PLC.
- Parameters editing in Operational Mode enabled.

Bug Fixes:

- Fixed the incorrect bit size for the 1SSI and PF-O-SIL 1DI module.
- CAN object 1C32:0C fixed.
- Incorrect parameter name for the 4DI 4DO PN FSoE module fixed (ESI file change).
- Firmware update via FoE is fixed.
- Corrected behavior of module status LED in WEB-Server for UR20-PF-O-1DI-SIL, UR20-PF-O-2DI-SIL and UR20-PF-O-2DI-SIL-DELAY

New supported modules:

- 1315440000 UR20-16DO-N
- 1315750000 UR20-1COM-232-485-422
- 2007430000 UR20-1COM-SAI-PRO
- All SAI-AU Mx SB Modules (IP 67)

Version 01.00.40**Release date: September 07, 2015****New features:**

- New web application – Note: It's necessary to update the language file, if the coupler has an older FW-version $\leq 01.00.40$
- Default password for the web server
- FSOE extensions
- Web server by default accessible via Ethernet

New supported module:

- 1529780000 UR20-4DI-4DO-PN-FSOE
- 1529800000 UR20-8DI-PN-FSOE

Version 01.00.37**Release date: May 22, 2015****New supported module:**

- 1315390000 UR20-16DI-N
- 1315400000 UR20-16DI-N-PLC-INT
- 1315580000 UR20-1CNT-500
- 1508090000 UR20-1SSI
- 1550070000 UR20-4DI-2W-230V-AC
- 1315350000 UR20-4DI-N
- 1315410000 UR20-4DO-N
- 1315420000 UR20-4DO-N-2A
- 1315370000 UR20-8DI-N-3W
- 1315430000 UR20-8DO-N
- 1315220000 UR20-4DO-P
- 1394400000 UR20-8DI-P-3W

New features:

- Improved comparison between target and actual set-up of a station
- Better EtherCAT compatibility

Bug Fixes:

- Parameters in the wrong sequence for 8AI-I-16-DIAG-HD

Version 01.00.36**Release date: March 20, 2014****New supported module:**

- 1508080000 UR20-2FCNT-100

Bug Fixes:

- Restarts field bus after re-plugging the field bus cable

- “All outputs off” for “Behavior of outputs on field-bus error” now works
- Writing parameters to the PWM-Module causes a coupler reset
- Output data of the last module in the station might be corrupted if it is a 16 or 32-Bit module

Version 01.00.33**Release date: March 20, 2014****New features:**

- Distributed clock
- New parameter Intel or Motorola data format

Bug Fixes:

- Improvement in the fail-safe value behavior at hot swap
- Support the default language of the PC in the web server

Version 01.00.32**Release date: November 25, 2013**

- First released version