

u-remote library for CODESYS 3.5

CODESYS package u-remote library release notes

Abstract:

The library package contains function blocks and functions for easy use of Weidmüller u-remote modules. This document contains the associated Release Notes.

Version 3.1.0

Release date: July, 2026

Information:

- New library category structure. Please find Weidmüller UR20 libraries in the library repository in /Application/Weidmueller/U-remote and in Weidmueller/U-remote.
- Please find license information in each library now.
- Renamed libWiUtils to libWiOpenUtils, added FB_LogEntry for easy logging to the device log.
- Changed flush bit and timeout settings in libWiUr20ComRs_232_422_485.
- Added new library libWiUr20AoUi with FBs for Analog Out u-remote modules.
- Added FBs for handling diagnostic alarm messages to libWiUr20ComRs_232_485_422_V2, libWiUr20AiUi, libWiUr20AoUi.
- Added FBs for Modbus TCP parameter read/write to libWiUr20ComRs_232_485_422_V2, libWiUr20AiUi, libWiUr20AoUi.

Bug fixes:

- Fix no-change-event handling in FB_UR20_1ComRs_232_485_422_V2_ModbusMaster in libWiUr20ComRs_232_485_422_V2.

Known issues:

- The UR20_1COM_232_485_422_V2 firmware versions 1.0.4 and older have known issues:
 - Round robin search of channel-to-serve-next in Modbus Master mode causes wrong no-change-events if a change affects the same channel twice. This breaks etChannelDiag of the configured channels.
 - Crosstalk between diagnosis bytes of the configured channels in Modbus Master mode and Modbus Slave mode. This issue renders the diagnosis information in etChannelDiag of the configured channels unreliable if the user configures more than one channel. If you need diagnosis information on the Modbus transfers, configure one channel only, when using the Modbus Master- or Modbus Slave mode of the module.
 - in Modbus Master mode, the payload size for transfer from the module to the PLC or fieldbus coupler for Read Coil- and Read Discrete Input - Function codes falsely depend on bit- and register offset. As a workaround, the FB_UR20_1ComRs_232_485_422_V2_ModbusMaster in the library libWiUr20ComRS_232_485-422_V2 does not verify the payload size. This issue affects the internals of this FB but has no relevant effect on user data.

Version 3.0.1

Release date: July, 2025

Information:

- Hot fix against hanging behavior model state machine in function block FB_UR20_1ComRs_232_485_422_V2_ModbusMaster in libWiUr20-ComRs_232_485_422_V2.

Bug fixes:

- Fixes non-deterministically hanging behavior model state machine bug FB_UR20_1ComRs_232_485_422_V2_ModbusMaster in libWiUr20-ComRs_232_485_422_V2 when transitioning from state 'active' to state 'standby'.

Known issues:

- The UR20_1COM_232_485_422_V2 firmware versions 1.0.3 and older have known issues:
 - Crosstalk between diagnosis bytes of the configured channels in Modbus Master mode and Modbus Slave mode. This issue renders the diagnosis information in etChannelDiag of the configured channels unreliable if the user configures more than one channel. If you need diagnosis information on the Modbus transfers, configure one channel only, when using the Modbus Master- or Modbus Slave mode of the module.
 - in Modbus Master mode, the payload size for transfer from the module to the PLC or fieldbus coupler for Read Coil- and Read Discrete Input - Function codes falsely depend on bit- and register offset. As a workaround, the FB_UR20_1ComRs_232_485_422_V2_ModbusMaster in the library libWiUr20ComRs_232_485_422_V2 does not verify the payload size. This issue affects the internals of this FB but has no relevant effect on user data.

Version 3.0.0

Release date: July, 2025

Information:

- Breaking change: The libWi-libraries and libWi-libraries used therein as dependencies may need to be re-resolved in existing Codesys projects due to change in the company name. Please refer to the chapter “libWi library usage” in the library package documentation.

New Supported Modules:

- UR20-1COM-CAN
- UR20-1COM-CANOPEN

New features:

- Added xNewDataArrived flag in Modbus Master FB in libWiUr20ComRs_232_485_422_V2.
- Added the chapter “libWi library usage” that explains how to install the package and re-resolve library references in customers’ Codesys projects.
- libWirUr20ComCan: FB for transparent mode
- libWiUr20ComCanopen: new FB for reading and writing SDO data at CANopen mode
- libWiUr203EM_230V_AC: add support for diag- and process alarm message handling

Bug fixes:

- Fixed write channel diag missing bug in libWiUr20ComRs_232_485_422_V2
- libWiUr20ComRs_232_485_422: fix too short timeouts of param sysbus r/w FBs
- libWiUr20ComRs_232_485_422_V2:
 - fix bug in modbus master FB: processing multiple write channels might fail
 - fix bug in modbus master FB: process data events of 1COMv2, update etChannelDiag of write channels
- libWiUr20_2AI_SG: fix param sysbus r/w timeouts
- libWiUr20AiUi: fix param sysbus r/w timeouts
- libWiUr20PWM: fix param sysbus r/w timeouts
- libWiUr20RTD: fix param sysbus r/w timeouts
- libWiUr20TC: fix param sysbus r/w timeouts
- libWiUr204ComIolink: fix for Modbus TCP connect

Known issues:

- The UR20_1COM_232_485_422_V2 firmware versions 1.0.3 and older have known issues:

- Crosstalk between diagnosis bytes of the configured channels in Modbus Master mode and Modbus Slave mode. This issue renders the diagnosis information in etChannelDiag of the configured channels unreliable if the user configures more than one channel. If you need diagnosis information on the Modbus transfers, configure one channel only, when using the Modbus Master- or Modbus Slave mode of the module.
- in Modbus Master mode, the payload size for transfer from the module to the PLC or fieldbus coupler for Read Coil- and Read Discrete Input - Function codes falsely depend on bit- and register offset. As a workaround, the FB_..._ModbusMaster in the library libWiUr20ComRs_232_485_422_V2 does not verify the payload size. This issue affects the internals of this FB but has no relevant effect on user data.