



## Web Socket Client SL

With the 'Web Socket Client SL' library, a bidirectional connection to a web server can be established over the Internet.

### Product description

The WebSocket protocol allows for bidirectional communication between a client and a Web Socket Server over the Internet. Communication usually takes place via TCP port number 443 (or 80 for unsecured connections). The 'Web Socket Client SL' library provides function blocks for communication via the WebSocket protocol.

### Included components

The library includes a Web Socket Client with the following function blocks:

#### WebSocketClient

With the function block `WebSocketClient`, a connection to a Web Socket Server can be established. Unencrypted (`ws://`) and encrypted (`wss://`) connections are supported. Messages can be sent and received by means of the `Write` and `Read` methods.

#### WebSocketRead

The function block `WebSocketRead` encapsulates the `Read` method of the function block `WebSocketClient` for use in graphical languages (example: CFC).

#### WebSocketWrite

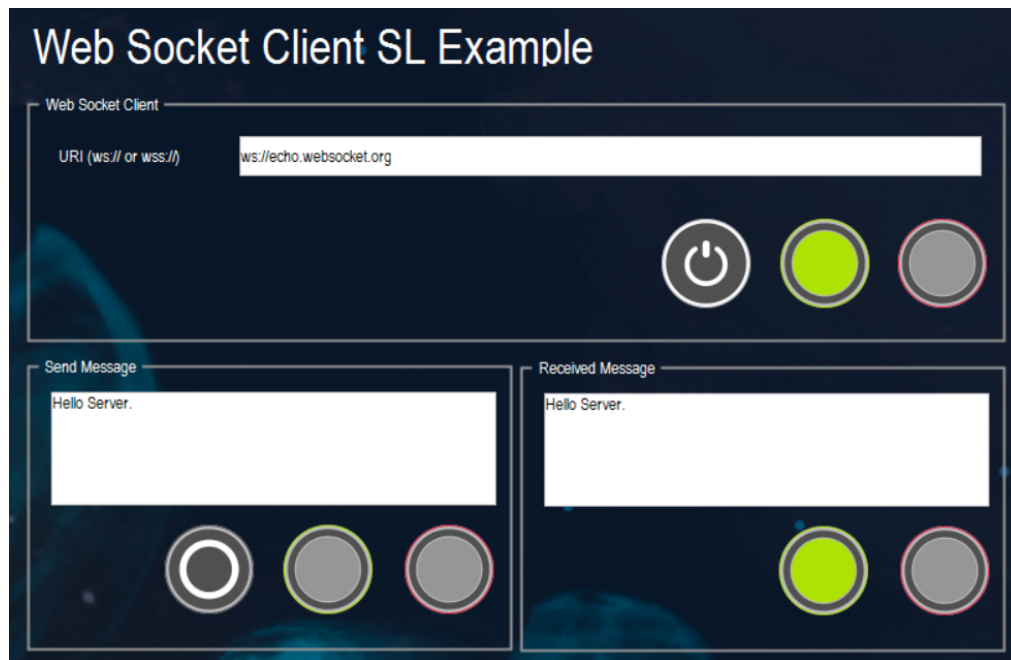
The function block `WebSocketWrite` encapsulates the `Write` method of the function block `WebSocketClient` for use in graphical languages (example: CFC).

### Supported functions

- Unencrypted connections (`ws`)
- Encrypted connections (`wss`, configurable TLS settings)
- Configurable ping interval
- Communication via an HTTP Proxy Server
- Fragmented packages
- Possible extension via WebSocket extensions (not included in this library)
- Any subprotocols: Parsing and generating of messages based on the subprotocol is not implemented in the WebSocket client, and have to be done by the layer above it (example: MQTT Client).

**Sample project**

The sample project 'Web Socket Client SL Example.project' demonstrates how to use the library. A connection to a web socket server can be established via a visualization and text messages can be sent and received.



*Visualization: Web Socket Client SL Example*

## General information

### Supplier:

CODESYS GmbH  
 Memminger Strasse 151  
 87439 Kempten  
 Germany

### Support:

Technical support is not included with this product. To receive technical support, please purchase a CODESYS Support Ticket.

<https://support.codesys.com>

### Item:

Web Socket Client SL

### Item number:

2311000000

### Sales/Source of supply:

CODESYS Store  
<https://store.codesys.com>

### Included in delivery:

CODESYS Package

## System requirements and restrictions

<b>Development system</b>	CODESYS Development System V3.5.15.0
<b>Runtime</b>	CODESYS Control V3.5.15.0
<b>Supported platforms and devices</b>	Note: Use the "Device Reader" project for locating the functions supported by the PLC.
<b>Additional requirements</b>	Required libraries: <ul style="list-style-type: none"> <li>• SysSocket2 3.5.16.0</li> <li>• Net Base Services 3.5.17.0</li> <li>• CmpCrypto</li> <li>• CmpTls 3.5.15.0 and CmpX509Cert.</li> </ul>
<b>Restrictions</b>	-
<b>Licensing</b>	License activation is optional on the CODESYS Key or Soft Key. (The Soft Key is a free component of CODESYS Control.) Licensing by means of the Soft Key is bound to the hardware.

Note: Without a license, the software runs for 30 minutes in demo mode.

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<b>Required accessories</b>	-
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*Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.*

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