EMScope JavaScript API

JavaScript client library for the EMScope EMI measurement instrument (SW ≥ 4.1).

This is the browser counterpart of the Python `api_v5.py` client and follows the exact same wire protocol. Refer to the WebSocket API documentation for the full protocol description.

Current API — Software ≥ 4.1

The

api_v5.js

and

api_example_v5.html

files are provided for EMScope software version **4.1 and later**.

Include `api_v5.js` in your HTML page. No external dependencies are required for browser use. Under **Node.js**, install the `ws` package and pass it via the `WebSocketImpl` option (see below).

The example file `api_example_v5.html` is a self-contained browser application with a live spectrum plot, configuration panel, and message log. Open it directly in a browser after setting the instrument IP address.

Connection model

Unlike the Python client (which uses an explicit receive loop), the JavaScript client is **event-driven**. The WebSocket connection opens automatically when the object is constructed. All incoming messages are delivered via the callback.

RBW / frequency bands

Value	RBW	Frequency range	Standard
200	200 Hz	9 kHz – 150 kHz	CISPR 16-1-1
9	9 kHz	150 kHz – 30 MHz	CISPR 16-1-1
120	120 kHz	30 MHz – 110 MHz	CISPR 16-1-1
1	1 kHz	10 kHz – 150 kHz	MIL-STD-461
10	10 kHz	150 kHz – 30 MHz	MIL-STD-461
200_9	dual	9 kHz – 30 MHz	CISPR dual-band
1_10	dual	10 kHz – 30 MHz	MIL dual-band

Node.js

The library is compatible with Node.js. Install the **ws** package and pass it as the WebSocket implementation via the constructor options. See the source file for details.

Legacy APIs

Software ≤ 3.13

The

api.js

and

api_example.html

files are provided for use with EMScope software versions **3.13 and earlier**.

Required: a modern browser with native WebSocket support.

From:
https://emzer.com/wiki/ -

Permanent link:
https://emzer.com/wiki/doku.php?id=public:emscope:javascript_api

Last update: **2026/09/04 11:09**