

Tasmota is a very well-known open-source implementation for microcontrollers based IoT devices (ESP-based, like ESP32, ESP8266) mostly used in smart home applications:

<https://tasmota.github.io/docs/>

Tasmota provides webserver based access (and many more interfaces!), where also a command API can be used via the webserver.

The library „TasmotAPI“ provides a http client implementation (based on the ashttp library) to communicate with such a Tasmota firmware based device via the web API.

The implementation just provides the webservice access itself, not the parsing of the JSON based response data -> this must be done by own code!

Commands and responses depend on the Tasmota device, please see here in the Tasmota command reference:

<https://tasmota.github.io/docs/Commands/>

How to use: please see the simple sample task provided together with the library.

For example, after requesting the command “status 10” from the Tasmota device (“status 10” means: deliver sensor data), the device response is a JSON based object containing all sensor information of the device.

“Status 10” on my test device (a smart plug with measurement functions) responses for example with the following JSON object:

The screenshot shows a debugger interface with two main panes. The left pane displays a portion of the Tasmota source code in ST-Microelectronics' Structured Text (ST) language. The right pane is a 'Watch' window titled 'UsageTasmo:Main.st' showing variable values and memory dump details.

**Watch [UsageTasmo:Main.st]**

Name	Value
bSendRequest	FALSE
tasmotapiSendRequest_0	
enable	TRUE
sHost	'192.168.168.185'
uPort	80
sUser	"
sPassword	"
sCommand	'status 10'
pResponseBuffer	77437056
uResponseBufferSize	810
bSendCommand	FALSE
sendCommandBusy	FALSE
sendCommandSuccess	FALSE
sendCommandError	FALSE
status	0
http_Status	0
responseDataLen	292

**Auto Watch [UsageTasmo:Main.st]**

The right pane also shows a memory dump of the response buffer, with several entries highlighted in yellow:

- iResponse[0]: [{"Status": "SNS", "Time": "2025-11-24T12:44:38", "ENERGY": {"TotalStart": "2025-11-23T10:33:58", "Total": "0.0000", "Yesterday": "0.0000", "Today": "0.0000", "Power": "0.000", "ApparentPower": "0.000", "ReactivePower": "0.000", "Factor": "0.00", "Voltage": "221", "Current": "0.0"}, "ESP32": {"Temperature": "54.9", "TempUnit": "C"}]}
- sResponse[1]: "
- sResponse[2]: "
- sResponse[3]: "
- sResponse[4]: "
- eResponse[5]: "