Airobot thermostat TE1 local API specification

**Minimum firmware version
required: 1.8**

Overview

Airobot thermostat can be controlled in internal network through **local API**.

Important to know:
- The local API operates by connecting the Airobot thermostat to the local WiFi Ethernet network.
- To utilize the API, the thermostat must first be registered through the server. This entails connecting the thermostat to an internet-enabled Wi-Fi network at least once. During the initial connection, the thermostat receives a Device ID (username) and password. Later internet connectivity is not required.
- The API is disabled by default but can be enabled from the thermostat settings under "Connectivity - Local API – Enable."
- Authentication (Basic Auth) is required for API access. The username and password can be found in the thermostat menu under the "Mobile app" screen, and the same credentials are used to pair the mobile app.

Main URL: http://airobot-thermostat-t01**xxxxxx**.local/api/thermostat/
Alternative URL: http://*IP-address-here*/api/thermostat/

Username: *your thermostat ID*
Password: *your thermostat password*

Read data

Thermostats measure air every 30 seconds, which is the minimum recommended polling interval for each thermostat.

API call	Description	Example response

GET /getStatuses	Returns all read-only parameters	`{`
		`  "DEVICE_ID": "T01XXXXXX",`
		`  "HW_VERSION": "256",`
		`  "FW_VERSION": "262",`
		`  "TEMP_AIR": 220,`
		`  "HUM_AIR": 400,`
		`  "TEMP_FLOOR": 300,`
		`  "CO2": 800,`
		`  "AQI": 5,`
		`  "DEVICE_UPTIME": 124,`
		`  "HEATING_UPTIME": 117,`
		`  "ERRORS": 0,`
		`  "SETPOINT_TEMP": 245,`
		`  "STATUS_FLAGS": [`
		`    {`
		`      "WINDOW_OPEN_DETECTED": 0,`
		`      "HEATING_ON": 1`
		`    }`
		`  ]`
		`}`

Parameter	Description	Unit	Min	Max
DEVICE_ID	Unique identifier			

HW_VERSION	Version code of the hardware		256	999
FW_VERSION	Version code of the firmware		256	999
TEMP_AIR	Temperature measurement, example value 220 means 22.0 °C	°C	-999	65535
HUM_AIR	Relative humidity measurement, example value 300 means 30%	%	0	65535
TEMP_FLOOR	Temperature measurement from NTC floor sensor, example value 220 means 22.0 °C. Value 32767 indicates floor sensor not attached	°C	-999	32767
CO_2	Carbon dioxide measurement, value 65535 indicates CO_2 sensor is not equipped to this device	ppm	0	65535
AQI	Air quality index, only for devices with equipped with CO^2 sensor		0	5
DEVICE_UPTIME	Device working time since last power up or reboot	seconds	0	uint32 4294967295
HEATING_UPTIME	Heating requested working time since last off time.	seconds	0	uint32 4294967295
ERRORS	If value is > 0, then it indicates some error with thermostat		0	65535
SETPOINT_TEMP	Setpoint temperature in HOME mode, example value 220 means 22.0 °C. From version 1.9 it will start returning current actual setpoint temperature.		50	350
WINDOW_OPEN_DETECTED	No functionality yet		0	1
HEATING_ON	Value = 1, then heating is requested by the thermostat		0	1

Read & write data

It is only allowed to set values in Min - > Max range, otherwise it might cause unexpected behaviour or damage the device.

API call	Description	Example response

GET /getSettings
 	
POST /setSettings
	Returns all settings	{
		  "DEVICE_ID": "T01648142",
		  "MODE": 1,
		  "SETPOINT_TEMP": 220,
		  "SETPOINT_TEMP_AWAY": 180,
		  "HYSTERESIS_BAND": 1,
		  "DEVICE_NAME": "Bedroom",
		  "SETTING_FLAGS": [
		    {
		      "REBOOT": 0,
		
		"ACTUATOR_EXERCISE_DISABLED": 0,
		      "RECALIBRATE_CO2": 0,
		      "CHILDLOCK_ENABLED": 0,

		"BOOST_ENABLED": 0
		      }
		   ]
		}

Parameter	Description	Unit	Default value	Min	Max
DEVICE_ID	Unique identifier (read only)				
MODE	Device working mode 1 = HOME 2 = AWAY		1	256	999
SETPOINT_TEMP	Setpoint temperature in HOME mode, example value 220 means 22.0 °C	°C	220	256	999
SETPOINT_TEMP_AWAY	Setpoint temperature in AWAY mode, example value 180 means 18.0 °C	°C	180	-999	65535
HYSTERESIS_BAND	Hysteresis for heating, default 0,1°C (value 1)	°C	1	-50	50
DEVICE_NAME	Thermostat name, for example *Living room*	Chars	-	1	20
REBOOT	Reboots thermostat		0	0	1
ACTUATOR_EXERCISE_DISABLED	Disables actuator exercise functionality		0	0	1
RECALIBRATE_CO2	Initiates CO_2 sensor calibration – current air is set as new 400PPM value. Only activate if air is clean. Not recommended to use as CO_2 sensor has auto-calibration algorithm by default enabled		0	0	1
CHILDLOCK_ENABLED	Enabled child lock that will deactivate touch buttons on the thermostat panel. Can be disabled from the panel also.		0	0	1
BOOST_ENABLED	Enables heating for 1 hour no matter the mode or setpoint temperature		0	0	1