United API examples

This document gives an example of messages in United API. All values are in hexadecimal format in messages.

# Discovery

Sender, to 255.255.255.255:

01 00 00 54

Sender message: Discovery broadcast

Response from a device in the same network:

01 00 00 20 00 26 C7 4D 00 54 45 53 4C 41 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 64 F3

Response message:

Device Type is: 00 20 = Water Heater

ID is: 00 4D C7 26

Name is: 54 45 53 4C 41 = “TESLA”

# Restart

Sender, to the device IP address: 02 E8 03 BC

Send message: Restart in 1000ms

Response: 02 E8 03 BC

Response message: Acknowledge

# Configuration Read

Sender, to the device IP address: 21 00 00 74

Send message: Configuration Read

Response: 21 00 00 20 00 A7 9C DB 00 54 65 73 74 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 64 00 01 09 32 42 6F 69 6C 65 72 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 03 00 FF FF 01 01 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 00 00 45 49 43 43 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 65 69 63 63 77 6C 61 6E 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF FF FF FF FF 45 49 43 43 5F 44 42 39 43 41 37 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0B 01 00 00 00 00 00 00 00 04 64 00 01 00 00 00 01 00 00 00 C7

Response message:

Device Type is: 00 20 = Water Heater

ID is: 00 DB 9C A7

Name is: 54 65 73 74 = “Test”

Model: 01

Company: 01

SoftAP SSID: 45 49 43 43 5F 44 42 39 43 41 37 = “EICC\_DB9CA7”

Station SSID: 45 49 43 43 = “EICC”

Station Password: 65 69 63 63 77 6C 61 6E = “eiccwlan”

# Configuration Write

Sender to the device IP: 22 00 00 20 00 A7 9C DB 00 54 65 73 74 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 64 00 01 09 32 42 6F 69 6C 65 72 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 03 00 FF FF 01 01 00 00 FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 00 00 45 49 43 43 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 65 69 63 63 77 6C 61 6E 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF FF FF FF FF 45 49 43 43 5F 44 42 39 43 41 37 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0B 01 00 00 00 00 00 00 00 04 64 00 01 00 00 00 01 00 00 00 C4

Sender message: The same configuration from the previous example

Response: 22 00 00 77

Response message: Acknowledge

# Control Read

Sender to the device IP: F1 00 00 A4

Response: F1 00 00 01 96 00 22 0A 00 00 01 0A 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FE 8C 62

Response message:

Power: 01 = ON

Setpoint: 00 96 = 150 = 15.0c

Mode: 22 = Critical Mode

Measured High: 00 0A = 10 = 1.0c

Relay: 00 = OFF

Smart State: 01 = Idle

Measured Low: 00 0A = 10 = 1.0c

Error/Warnings:

EW[0..6] = 00 00

EW[7] = 8C FE  
Flag is Up, value is CFE = 3326

The device is in critical mode because there is no communication between the display and the thermostat. Because of this the measured temperatures are at “1.0c’

# Control Write

Sender to the device IP: F2 00 00 00 0A 00 00 AD

Response: F2 00 00 A7

Response message: Acknowledge