

CYCON-1280-4G Quick Start Guide

For use with temperature sensor

August 2019 – for firmware version 2.2.1

1. Preparing and connecting the unit

Make sure you know the phone number of the new SIM. Use a full “standard” size SIM, with SMS capabilities enabled (most voice enabled SIMs allow this). Insert the SIM into the slot, following the orientation printed on the front of the CYCON unit. Push it inside until you feel it “click” and it should lock in place.

Refer to the user manual for wiring details. Here’s a quick summary:

- Connect the antenna to the socket marked “GSM”.
- Connect the temperature sensor’s 24-way plug into the matching socket.
- Remove the 4-pin loop plug (battery backup models only) from the CYCON. Plug in the mains adaptor’s 4-pin plug into the 4-pin socket of the CYCON.

2. Power-up check

Check that the LEDs light up on the front of the CYCON unit. There should be a yellow LED flashing slowly all the time, and an orange LED flashing from time to time. If you don’t see LEDs on, check your power connection (for DC power please also check that you’ve connected the correct wires to the +DC power and ground).

If you have inserted a valid SIM card and the unit has registered on the mobile network then you will also see a green LED on. If there is an issue with the SIM card (eg. if it requires a PIN, or if it’s not valid) then a red LED will light.

3. Check connectivity

Use your phone to send an SMS text message to the unit (sending to the phone number of the new SIM Card). The SMS should contain the following:

```
#ver
```

If everything is working correctly you should receive a reply via SMS within a minute or two, confirming the model number and firmware version.

4. Set up message recipients

Message recipients are arranged in groups. To add a new recipient for receiving alerts, add them to group “a” by sending the following message to the unit:

```
#group a add 0411111111
```

(replacing the phone number with the desired recipient number). The device will send back an “OK” message to acknowledge if you have done the command correctly. You can add up to 16 recipients to each of groups a, b, c and d. If you later want to remove a phone number from a group, just use the “#group a del 04111111” command.

5. Set up the site identifier / title

Normally when the device sends alerts, you’ll want it to include information about which site it’s on, so recipients know where the alarm has occurred. This is done by setting the title to a suitable text string. To set the title, send a message to the device as follows:

```
#title Cool Room 1
```

(replace “Cool Room 1” with your own site identifier). The unit should send back a response indicating the command was OK.

6. Set up the alert messages

Now you need to set up the actual message text to be sent when the temperature goes outside range. To configure the high temperature alert message, send the following:

```
#rmsg ti hi 8.5 a Temperature is HIGH!
```

Where you can replace “8.5” with the temperature limit you want to alert at (in degrees C), and replace “Temperature is HIGH!” with the alert text you want it to send. “hi” indicates this is the message to be sent when the temperature goes *above* the specified temperature. “a” indicates the message is to be sent to group a – you can replace it with b, c or d if you’re using a different group.

To configure an alert when the temperature drops back to the normal range, send:

```
#rmsg ti ok a Temperature is OK!
```

And for an alert where the temperature is below a low threshold, send:

```
#rmsg ti lo 1.5 a Temperature is LOW!
```

Where you should replace “1.5” with the low temperature threshold in degrees C, and replace “Temperature is LOW!” with your own alert text.

You can also adjust other settings such as the sampling rate, an alarm delay time, and the deadband/hysteresis - please refer to the user manual for details.

7. Set up power supply outage alerts (battery backup models only)

If you bought the unit with backup battery, you can also enable it to send you SMS alerts when the power supply drops out. This is simply done by sending the following message:

```
#group a power on
```

8. Save the settings

After the configuration is done and you’ve received the response messages from each command, be sure to save the settings by sending this message:

```
#save
```

If you need to make changes afterwards then be sure you save it every time.

9. Check the temperature reading

Once you’ve configured the settings, wait for 2 minutes to allow it to take a measurement, and then send the following command:

```
#temp
```

The unit should send you a reply with the current temperature, if everything is configured and working OK. If there is no temperature reported:

- Check that the temperature sensor is plugged into the CYCON securely.
- Check that the “#rmsg” commands were set up correctly. You can review the settings by just sending:

```
#rmsg ti
```

10. Optional: Set up security

To prevent unauthorised people from being able to send commands to the CYCON unit, you can enable security. This restricts it to only respond to messages from people in specified groups.

- First you need to add all the phone numbers you want to allow, to a group, using the “#group” command as above. Make sure your own phone number is also added to the group.
- Then set security to only allow the group you want:
#security group b
(replacing “b” with all the groups you want to be able to send commands, separated by spaces – eg. “#security group b c d”)
- Then enable security:
#security on
- Then save the settings:
#save