

Quick Start Guide for Lightstack kits

This guide explains how to configure the lightstack kit using the R-UHF-SR220 CB, the R-UHF-SR420 CB (P-UHF-SR-LTSR-3C & P-UHF-SR-LTSR-3C-RS232) or the R-UHF-R700 CB (P-UHF-R700-LTSR-2C) reader.

1 P-UHF-SR-LTSR-3C & P-UHF-SR-LTSR-3C-RS232 kits (for R-UHF-SR220 CB & R-UHF-SR420 CB readers)

1.1 Introduction

The GPO1 is used to enable the GPO2 to GPO4 only when Cloudburst is up and running, so to avoid the buzzer to ring and the LEDs to be ON while CB is loading.

GPO2 to GPO4 are controlling the green, yellow and red LEDs as well as the buzzer.

GPO1 is HIGH level enabled, while GPO2 to GPO4 are instead active LOW.

1.2 GPO configuration

In the Cloudburst web Gui, go to the “GPO” tab and then configure the 4 outputs as explained in the next chapters.

1.2.1 GPO1

As written in the introduction, the GPO1 is controlling the other GPOs, therefore it must be always set as follows, otherwise the Lightstack will not work because the other GPOs are not enabled.



1.2.2 GPO2 to GPO4.

The second output (GPO2) is controlling the green LED, the third output (GPO3) is controlling the yellow LED and the fourth output (GPO4) is controlling both the red LED and the buzzer.

The GPO2 to GPO4 can be configured to be triggered by one of the following actions:

1. **Disabled**
The corresponding GPO is not configured, by default the output is set to logic level LOW.
2. **Active on tag read**
The corresponding GPO is activated every time a tag is read. After a user configurable timeout where no tags are read the GPO is deactivated.
3. **Active on tag read, antenna port selective**
The corresponding GPO is activated every time a tag is read with one of the antennas selected in the Antenna list. After a user configurable timeout where no tags are read the GPO is deactivated.
4. **Manually active**
The corresponding GPO is manually activated as soon as the settings are saved.

5. Active on SW's ready state

The corresponding GPIO is activated as soon as cloudburst is ready and configured.

6. Active on idle reader state

The corresponding GPIO is activated when cloudburst is ready, configured and no reading is ongoing.

7. Active on active reader state

The corresponding GPIO is activated when cloudburst is ready, configured and the reading is ongoing.

8. Active on communication error

The corresponding GPIO is activated when a communication error is triggered by HTTP POST or FTP.

9. Network connection status

The corresponding GPIO shows the status of the network connection. If Ethernet cable is disconnected the GPIO logic level is set to LOW. It may take up to 17 seconds before the logic state is updated.

Depending on your needs you can configure the outputs as you prefer choosing between the above options. Here below some examples.

Example 1:

— GPIO —

GPO 1	Active on SW's ready sta	Active level	High
GPO 2	Active on active reader si	Active level	Low
GPO 3	Active on idle reader stat	Active level	Low
GPO 4	Active on tag read	Active level	Low
		Pulse width	500 ms

GPO2 -> Green LED -> Active when the reader is transmitting

GPO3 -> Yellow LED -> Active when the reader is ready but not transmitting

GPO4 -> Red LED + Buzzer -> Active for 0.5seconds when a transponder is read.

Example 2:

— GPIO —

GPO 1	Active on SW's ready sta	Active level	High
GPO 2	Active on active reader si	Active level	Low
GPO 3	Active on idle reader stat	Active level	Low
GPO 4	Network connection statu		

GPO2 -> Green LED -> Active when the reader is transmitting

GPO3 -> Yellow LED -> Active when the reader is ready but not transmitting

GPO4 -> Red LED + Buzzer -> Active in case the reader is no longer connected to the network (i.e. to avoid data loss).

2 P-UHF-R700-LTSR-2C kit (for R-UHF-R700 CB reader)

2.1 Introduction

The GPO1 is used to enable the GPO2 and GPO3 only when Cloudburst is up and running, so to avoid the buzzer to ring and the LEDs to be ON while CB is loading.

GPO2 to GPO3 are controlling the green and red LEDs as well as the buzzer.

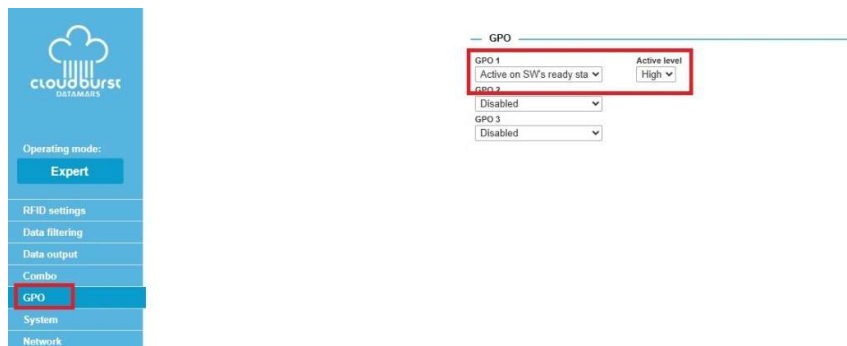
GPO1 is HIGH level enabled, while GPO2 and GPO3 are instead active LOW.

2.2 GPO configuration

In the Cloudburst web Gui, go to the “GPO” tab and then configure the 3 outputs as explained in the next chapters.

2.2.1 GPO1

As written in the introduction, the GPO1 is controlling the other GPOs, therefore it must be always set as follows, otherwise the Lightstack will not work because the other GPOs are not enabled.



2.2.2 GPO2 and GPO3.

The second output (GPO2) is controlling the green LED and the third output (GPO3) is controlling the red LED and the buzzer.

The GPO2 and GPO3 can be configured to be triggered by one of the following actions:

1. **Disabled**
The corresponding GPO is not configured, by default the output is set to logic level LOW.
2. **Active on tag read**
The corresponding GPO is activated every time a tag is read. After a user configurable timeout where no tags are read the GPO is deactivated.
3. **Active on tag read, antenna port selective**
The corresponding GPO is activated every time a tag is read with one of the antennas selected in the Antenna list. After a user configurable timeout where no tags are read the GPO is deactivated.
4. **Manually active**
The corresponding GPO is manually activated as soon as the settings are saved.
5. **Active on SW's ready state**
The corresponding GPO is activated as soon as cloudburst is ready and configured.
6. **Active on idle reader state**
The corresponding GPO is activated when cloudburst is ready, configured and no reading is ongoing.
7. **Active on active reader state**
The corresponding GPO is activated when cloudburst is ready, configured and the reading is ongoing.

8. Active on communication error

The corresponding GPO is activated when a communication error is triggered by HTTP POST or FTP.

9. Network connection status

The corresponding GPO shows the status of the network connection. If Ethernet cable is disconnected the GPO logic level is set to LOW. It may take up to 17 seconds before the logic state is updated.

Depending on your needs you can configure the outputs as you prefer choosing between the above options. Here below some examples.

Example 1:

— GPO

GPO 1	Active on SW's ready sta	Active level	High
GPO 2	Active on active reader si	Active level	Low
GPO 3	Active on tag read	Active level	Low
			500 ms

GPO2 -> Green LED -> Active when the reader is transmitting

GPO3 -> Red LED + Buzzer -> Active for 0.5seconds when a transponder is read.

Example 2:

— GPO

GPO 1	Active on SW's ready sta	Active level	High
GPO 2	Active on active reader si	Active level	Low
GPO 3	Network connection statu	Active level	

GPO2 -> Green LED -> Active when the reader is transmitting

GPO3 -> Red LED + Buzzer -> Active in case the reader is no longer connected to the network (i.e. to avoid data loss).

For additional information see the Cloudburst online help or the user manual at the following link:

<https://www.textile-id.com/cloudburst>.

Support

Contact Datamars Textile ID support team at support-tid@datamars.com or call the landline support at +41 91 935 73 80.