Grandstream Networks, Inc.

Connecting GDS3710 with GXP IP Phones

Configuration Guide

Table of Contents

Table of Figures

Connecting GDS3710 with GXP IP Phones
Configuration Guide

SUPPORTED DEVICES

Following table shows Grandstream products supporting GDS3710 integration:

Model	Supported		Firmware
	Audio	Video (JPEG)	
GXP16XX Series	Yes	No	1.0.4.65 or higher
GXP17XX Series	Yes	No	1.0.1.28 or higher
GXP21XX Series	Yes	Yes	1.0.8.49 or higher

Connecting GDS3710 with GXP IP Phones Configuration Guide

INTRODUCTION

GDS3710 HD is an IP video door system with a built-in hemispheric camera and some high-definition video capabilities. GDS3710 is ideal for monitoring from wall to wall without blind spots. Powered by an advanced Image Sensor Processor (ISP) and state of the art image algorithms, it delivers exceptional performance in all lighting conditions. It contains integrated PoE, LEDs, HD loudspeaker, RFID card reader, motion detector, lighting control switch, Alarm Input/output and more.

The GDS3710 IP video door system features industry-leading SIP/VoIP for 2-way audio and video streaming to smart phones and SIP phones, allowing to receive calls from GDS3710 on associated SIP phones when doorbell is pressed, opening door from the SIP phone, initiate calls from the phone to GDS3710 to get real time Video/Audio stream with GXP21xx IP Phones and only Audio stream with GXP17xx and GXP16xx IP Phones.

The GDS3710 can be connected with a SIP phone in 2 different ways, either using peering mode (without a SIP server) or through a SIP server/registrar.

This guide illustrates needed configuration for integrating the GDS3710 with GXP Series for both peering and using SIP server scenarios.

Connecting GDS3710 with GXP IP Phones
Configuration Guide

PEERING SCENARIO

In this scenario, we assume that the GDS3710 is installed on a small warehouse at front door and GXP IP Phone inside to monitor and control the access of the premise. Visitors need to press the doorbell button on the GDS3710 to initiate a video/audio call or only an audio call (depending on what the GXP Phone supports), and the related person at the GXP IP Phone side can open the door remotely to allow the visitors to get in as shown in the figure below.
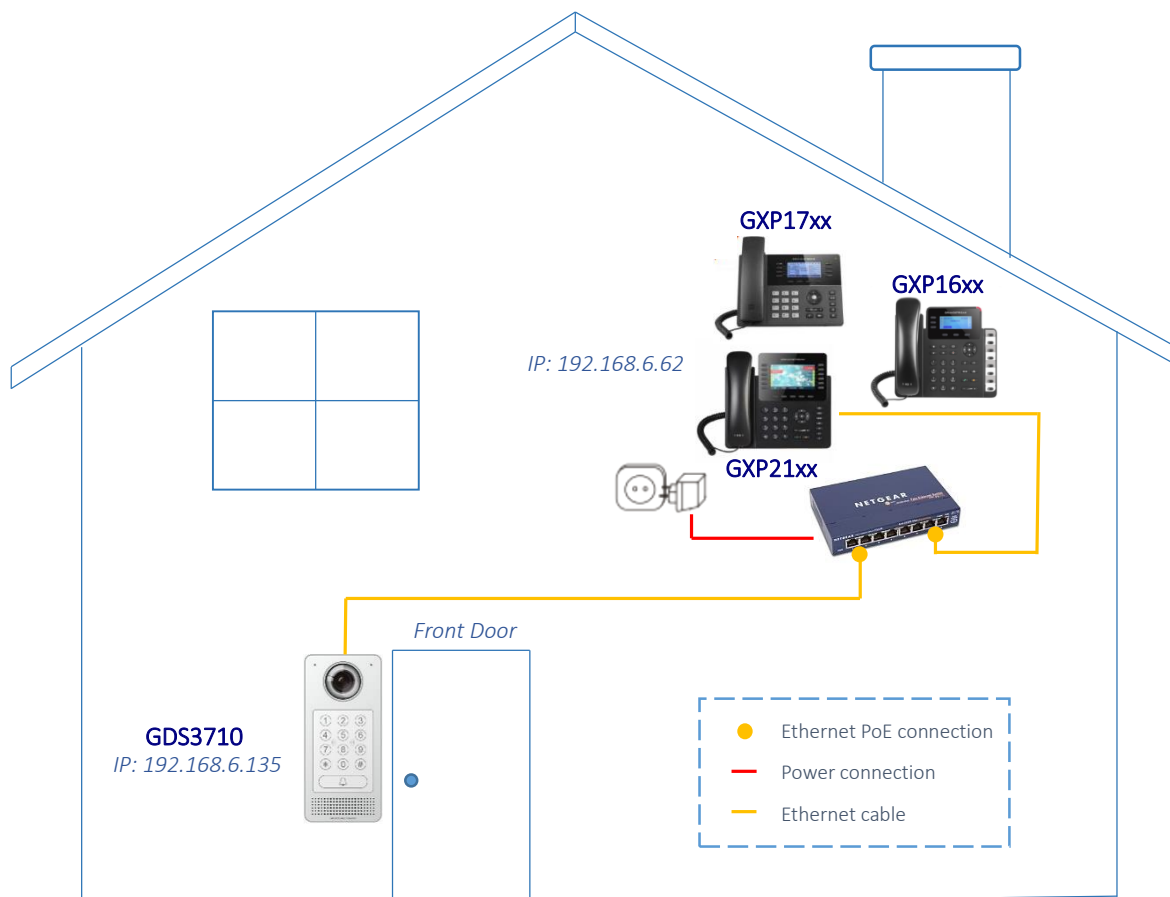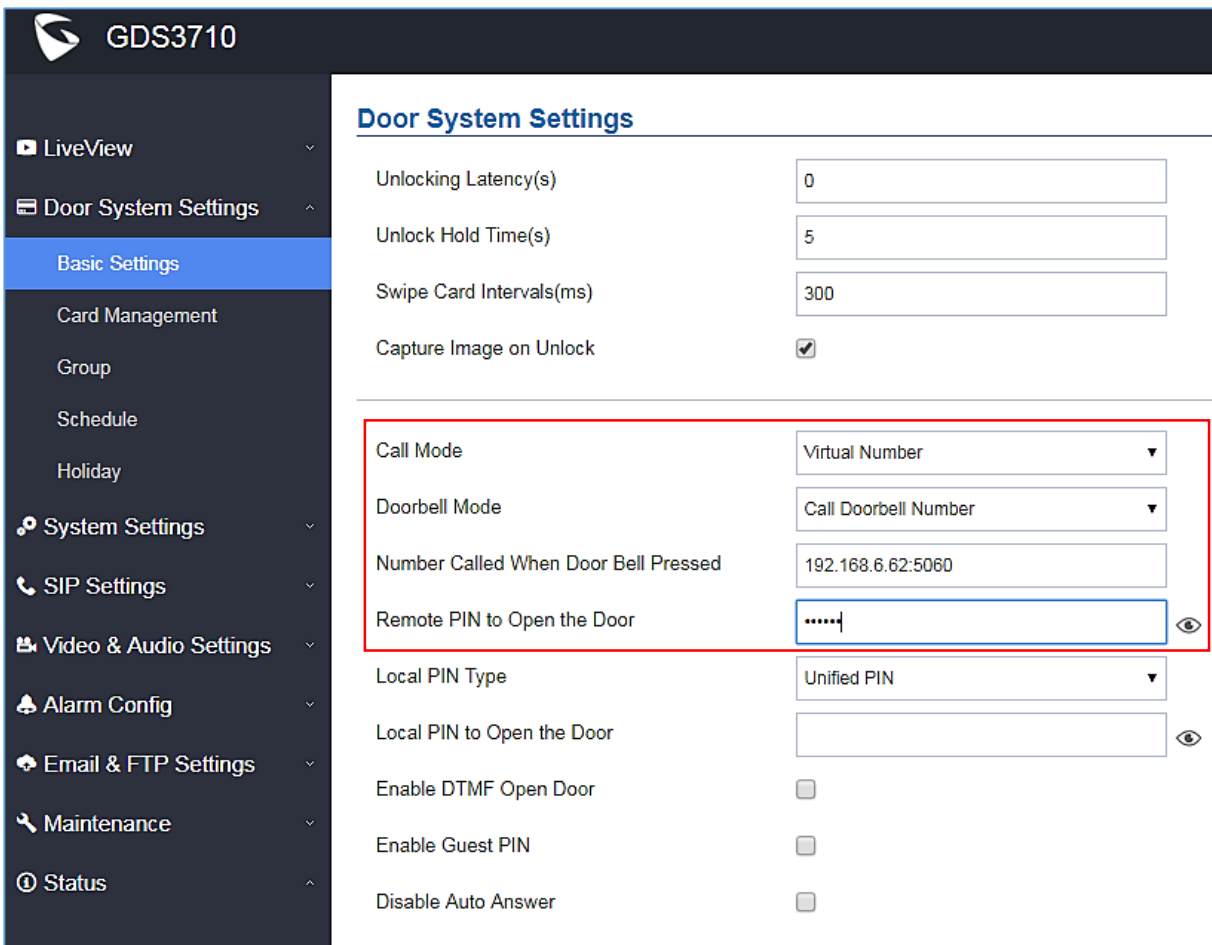

Figure 1: GXP IP Phones peered with the GDS3710

- The IP address used by the GDS3710 is 192.168.6.135.
- The IP address used by the GXP IP Phone is 192.168.6.62.

GDS3710 Configuration Settings

The GDS3710 needs to be configured with the IP address of the GXP IP Phone, the related SIP port, and remote PIN for door opening. Please refer to following configuration steps:

1. Access the GDS3710 Web GUI and navigate to "**Door System Settings→Basic Settings**".

2. Choose the action to be taken when the doorbell is pressed, three options are available:

- **Call Doorbell Number**: when Doorbell is pressed, a call will be made to the "Number Called When Door Bell Pressed"

- **Control Doorbell Output (Digital Output 1)**: when Door Bell is pressed electronic lock for Output 1 is opened.

- **Both of Above**: When selected, both Call Doorbell Number and Control Doorbell Output options are enabled. In our case we will choose "**Call Doorbell Number**".

3. Under **Number Called When Door Bell Pressed** field, enter the GXP IP address and port number which is **192.168.6.62:5060** in our example.

4. Enter the "**Remote PIN to Open the Door**" in order to open the door via DTMF while in active call with the GDS3710, the remote PIN used in our example is "**123456**".

5. Click [Save] button to apply changes.

Figure 2: Door System Settings

6. You need to make sure that the Direct IP Call feature is enabled from the GDS3710 Web GUI under **SIP Settings→SIP Advanced Settings→Enable Direct IP Call**.

Connecting GDS3710 with GXP IP Phones
Configuration Guide

Figure 3: Enable Direct IP Call

GXP IP Phones Configuration

The GXP IP Phone related account needs to be set as "Active", and the "Local SIP Port" needs to match the port configured on GDS3710. Please refer to following steps for configuring the GXP IP Phone in order to interconnect with the GDS3710.

1. Access GXP IP Phone Web GUI→**Account**→**General Settings** and set "Account Active" to **Yes**, then click on [Save and Apply] button to apply the new changes.

Figure 4: GXP2170 Account(x) Settings

2. Navigate to **Account**→**SIP Settings** and verify that the **Local SIP Port** configured on the GXP IP Phone is the same as the one on the GDS3710.

Figure 5: Account(x) SIP Settings

3. Navigate to **Settings→External Service** to configure GDS settings as explained on the following:

- Set the **Service Type** to **GDS**.

- Select the related account, in our example, the account used is **Account 1**.

- Specifies the **System Identification**, to identify the GDS3710, in our example its "**GDS3710_Front_Door**".

- Specifies the **System Number** which is the GDS3710 number, the system number used in our example is **192.168.6.135**.

- Configures the **Access Password** for opening the door remotely and it should match the password configured under "**Remote PIN to Open the Door**" on the GDS3710 Web GUI settings. The password used in our example is "**123456**".

Connecting GDS3710 with GXP IP Phones
Configuration Guide

Figure 6: GDS3710 Configuration Settings on GXP IP Phone

4. Press [Save and Apply] button to apply the new settings.

Notes:

- The GXP21xx/ GXP17xx/ GXP16xx IP Phones support up to 10 GDS3710 items.

- GXP16xx and GXP17xx series support audio only.

- GXP21xx series support audio and video (JPEG) when integrated with GDS3710.

Connecting GDS3710 with GXP IP Phones Configuration Guide

CONNECTION USING SIP SERVER

In this scenario, we assume that the GDS3710 is configured with a SIP account and the GXP IP Phone is also configured with a SIP account under the same SIP server.
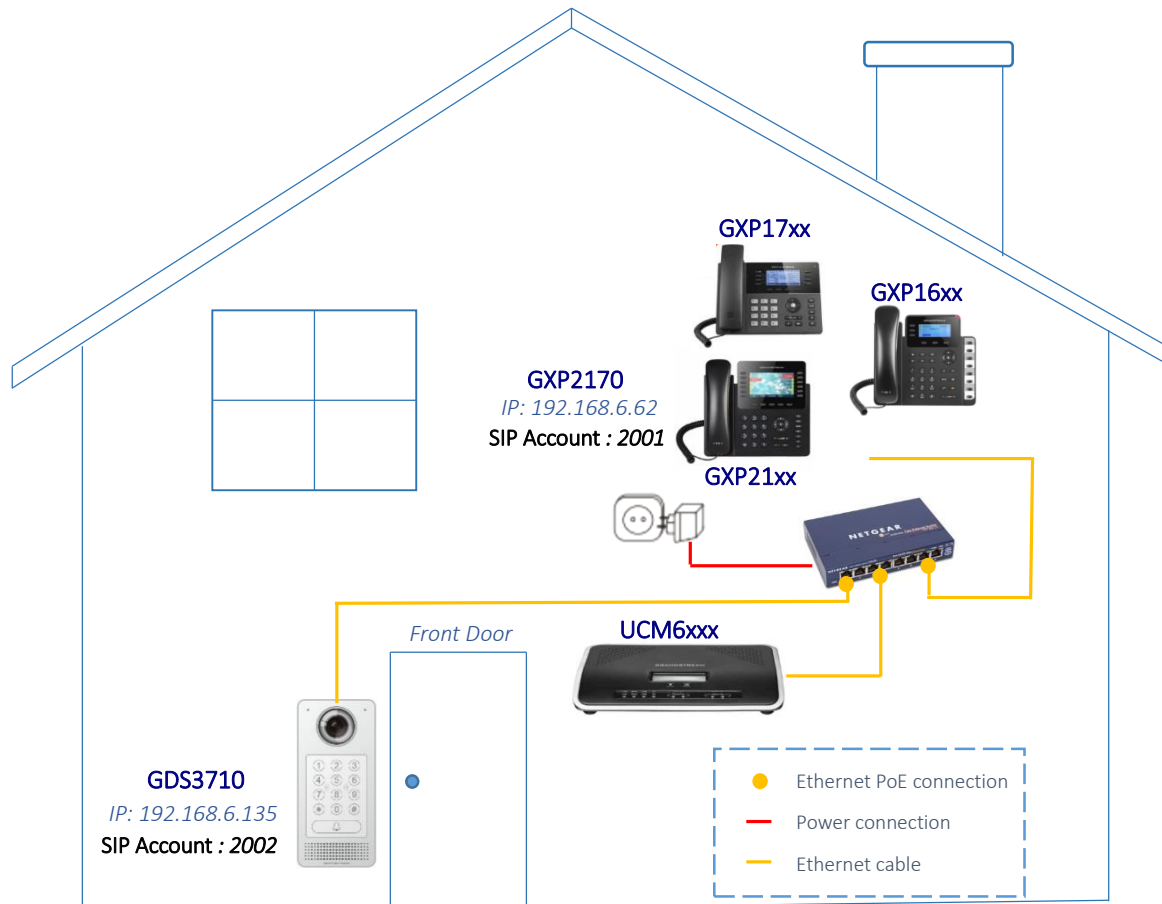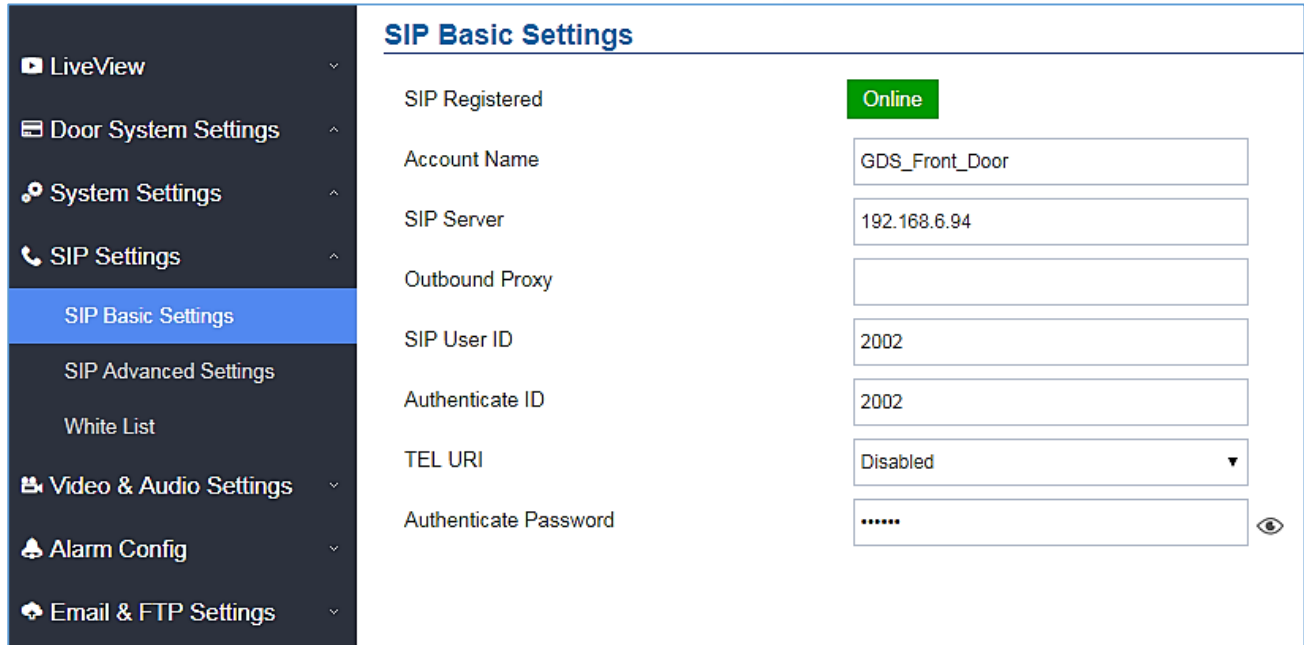

Figure 7: GXP2170 Connected to GDS3710 through UCM6XXX

- The IP address used by the GDS3710 is 192.168.6.135 and it's configured with SIP account **2002**.
- The IP address used by the GXP IP Phone is 192.168.6.62 and it is configured with SIP account **2001**.

GDS3710 Configuration Settings

As mentioned on the previous diagram, the GDS3710 should be registered with a SIP account in order to interact with the GXP IP Phone through the SIP server.

The GDS3710 SIP settings are available under the Web GUI→**SIP Settings**→**SIP Basic Settings**.

Connecting GDS3710 with GXP IP Phones
Configuration Guide

Figure 8: SIP Basic Settings

After configuring the SIP account correctly, user needs to configure the door system settings as detailed on the following steps:

1. Navigate to **Door System Settings→Basic Settings** then set the following:

   - **Doorbell Mode**: Call Doorbell Number.

   - **Number Called When Door Bell Pressed**: the GXP IP Phone number which is **2001** in our example.

   - **Remote PIN to Open the Door:** the remote PIN used in our example is "**123456**".

2. Click [Save] button to apply changes.

The following figure shows an example of the configuration.

Figure 9: Door System Settings

GXP IP Phone Configuration Settings

A SIP account needs to be registered on the GXP IP Phone side as well to interact with the GDS3710 trough the same SIP server.

The GXP IP Phone SIP settings are available under the Web GUI→**Accounts**→**Account(x)**→**General Settings**.

Connecting GDS3710 with GXP IP Phones
Configuration Guide

Figure 10: General Settings

After configuring the SIP account correctly, users need to configure the door system settings as detailed on the following steps:

1. Navigate to **Settings→External Service** and set the following:

   - Set the **Service Type** to **GDS**.

   - Select the related account, in our example, the account used is **Account 1**.

   - Specifies the **System Identification**, to identify the GDS3710, in our example its "**GDS3710_Front_Door**".

   - Specifies the **System Number** which is the GDS3710 number, the system number used in our example is **2002**.

   - Configures the **Access Password** which is the "**Remote PIN to Open the Door**" configured on the GDS3710 Web GUI settings. The password used in our example is "**123456**".

2. Press ![Save and Apply] button to apply the new settings.

Connecting GDS3710 with GXP IP Phones Configuration Guide

Figure 11: GDS Settings

Notes:

- The GXP21xx/ GXP17xx/ GXP16xx IP Phones support up to 10 GDS3710 items.

- GXP16xx and GXP17xx series support audio only.

- GXP21xx series support audio and video (JPEG) when integrated with GDS3710.

OPEN DOOR FEATURE

GXP IP Phones offer a powerful integration with GDS3710 Door System and allow users to remotely open the door, initiate calls to the GDS3710 and get real time audio/video or only audio stream.

Once someone presses the ring button on the GDS3710, the door system will initiate automatically a call to the configured destination. In both cases, the users will have the ability to either answer the call, reject it or press the **OpenDoor** softkey.

Users can open the door using the following methods:

1. **Pressing the "OpenDoor" Softkey without answering the call**:
   Once the users press the "OpenDoor" softkey, a SIP Message containing the code for "Remote PIN for Open the Door" will be sent to the GDS3710 to remotely open the door.

2. **OpenDoor after answering the call**:
   - Press the "**OpenDoor**" Softkey, then a SIP Message containing the code for "Remote PIN for Open the Door" will be sent to the GDS3710 to remotely open the door.

   - Dial the code for "**Remote PIN for Open the Door**" followed by "#" (for example "**123456#**"), and then DTMF codes will be sent to open the door.

Note: Pressing the "**Reject**" Softkey will reject the call received from the GDS3710.

GXP21xx IP Phones

Figure 12: GDS3710 Video/Audio Call on GXP2170

GXP17xx IP Phones

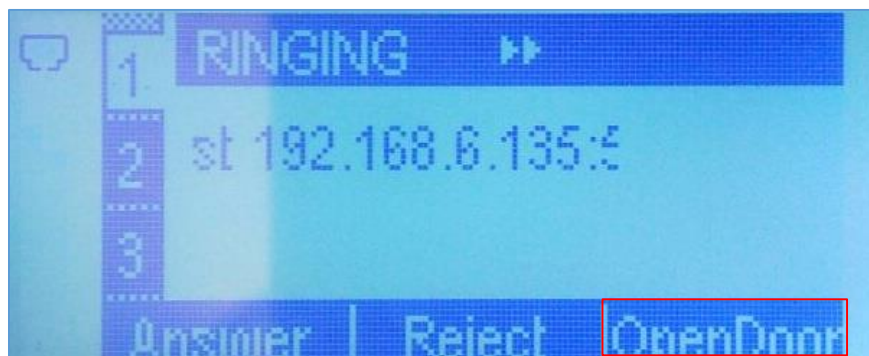**Figure 13: GDS3710 Audio Call on GXP1760 (Using SIP Server Scenario)**

GXP16xx IP Phones

Figure 14: GDS3710 Audio Call on GXP1630 in Peering Scenario

Connecting GDS3710 with GXP IP Phones
Configuration Guide