

Grandstream Networks, Inc.

GDS37xx - Facility Access System

GSC3570 - HD Intercom & Facility Control Station

Peering Scenario (Without SIP Server)



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SUPPORTED DEVICES

Following table shows the supported devices:

Table 1: Supported devices

Model	Minimum firmware
GDS3710	1.0.7.23 or higher
GDS3705	1.0.1.11 or higher
GSC3570	1.0.5.9 or higher



INTRODUCTION

The GDS37xx could be used alongside GSC3750 to form a complete solution for intercom and facility control.

In some environments where a SIP server is not used, GDS37xx and GSC3570 can still be connected together and function by IP peering, this will allow the GSC3570 to perform remote open door while being on a SIP direct IP call with the GDS37xx. When using GDS3710 users have also the possibility to remote open door without being in SIP direct IP call (NOT supported in GDS3705).

This guide illustrates needed configuration for peering the GDS37xx with GSC3570.



CONNECTION & WIRING DIAGRAM

Below diagram is representing an example of the wiring needed to connect GSC3570 with GDS37xx.

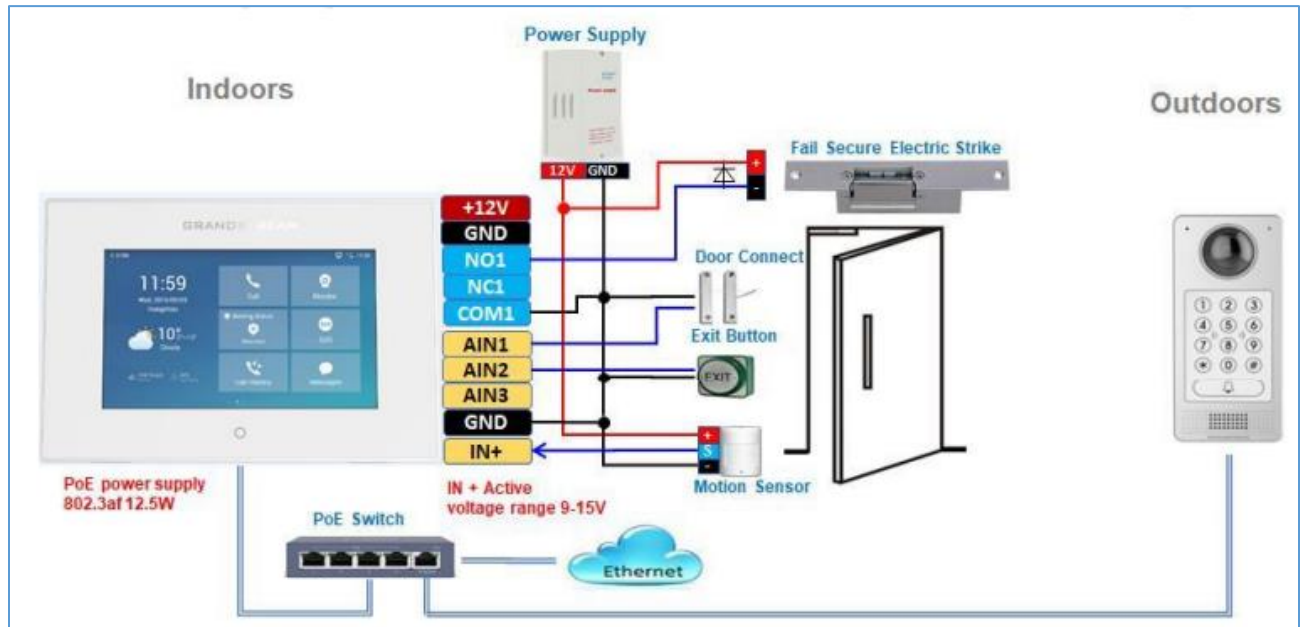


Figure 1: Wiring diagram example

Please refer to the [Wiring Diagrams](#) document for more examples and possible connections.

PEERING SCENARIO

In this scenario, we assume that the GDS3710 is installed on a small warehouse at front door and GSC3570 is located 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 direct IP calls, and the related person at the GSC3570 side can open the door remotely to allow the visitors to get in as shown in the figure below.

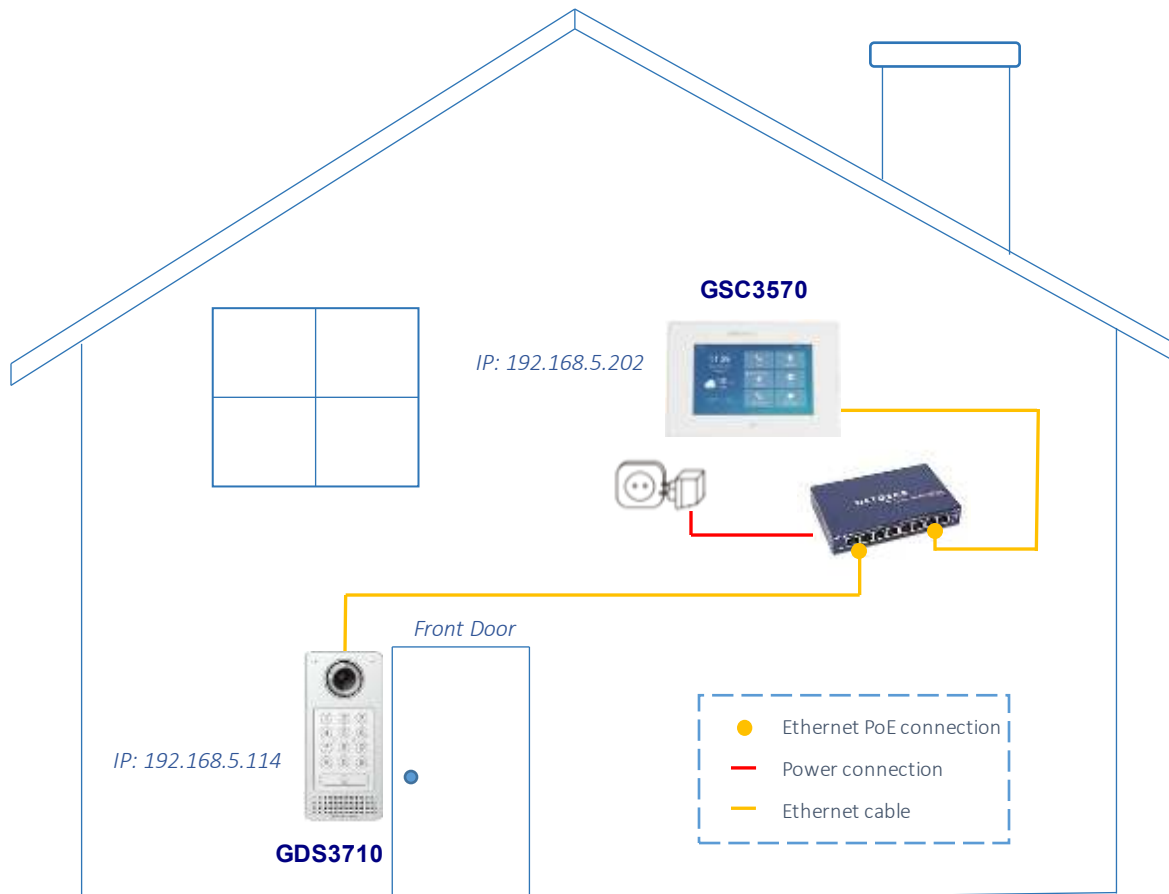


Figure 2: GSC3570 peered with the GDS3710

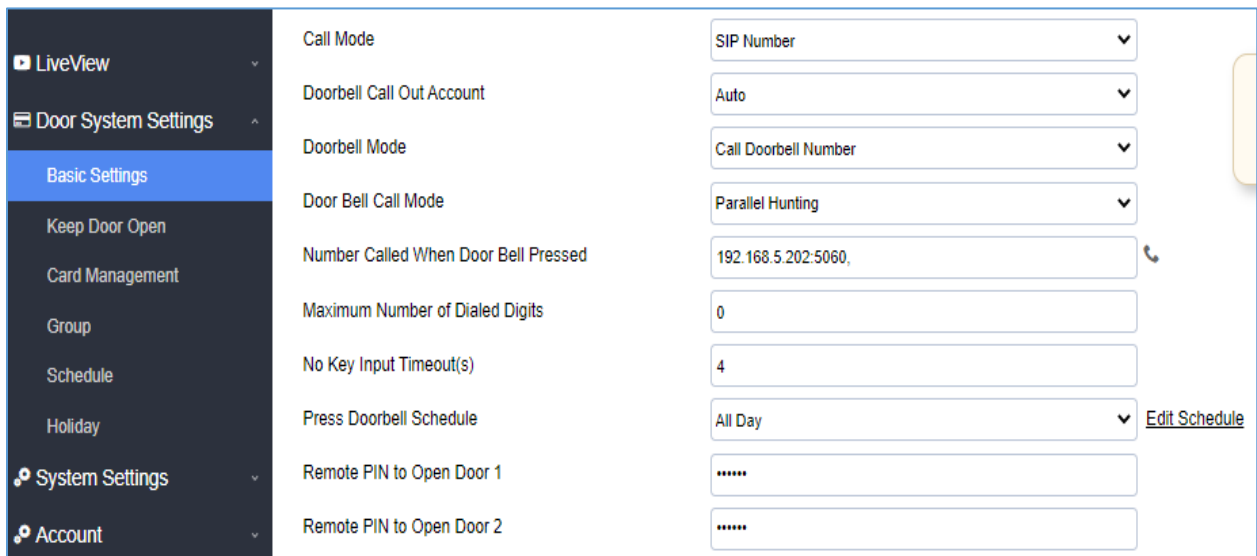
- The IP address used by the GDS3710 is 192.168.5.114
- The IP address used by the GSC3570 is 192.168.5.202

GDS37xx Configuration Settings

The GDS3710 needs to be configured with the IP address of the GSC3570, 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. Under **Doorbell Mode** 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 GSC3570 IP address and port number which is **192.168.5.202:5060** 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  button to apply changes.

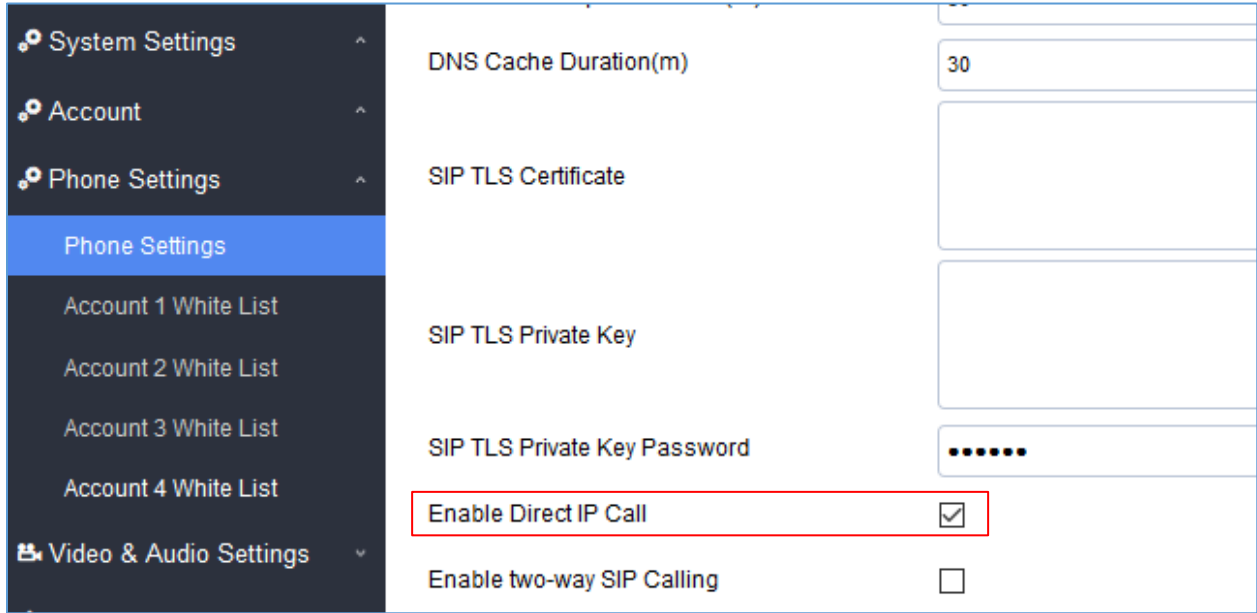


Call Mode	SIP Number
Doorbell Call Out Account	Auto
Doorbell Mode	Call Doorbell Number
Door Bell Call Mode	Parallel Hunting
Number Called When Door Bell Pressed	192.168.5.202:5060
Maximum Number of Dialed Digits	0
No Key Input Timeout(s)	4
Press Doorbell Schedule	All Day Edit Schedule
Remote PIN to Open Door 1	*****
Remote PIN to Open Door 2	*****

Figure 3: Door System Settings

6. You need to make sure that the Direct IP Call feature is enabled from the GDS3710 Web GUI under “**Phone Settings**” → “**Enable Direct IP Call**”. as shown in below screenshot.





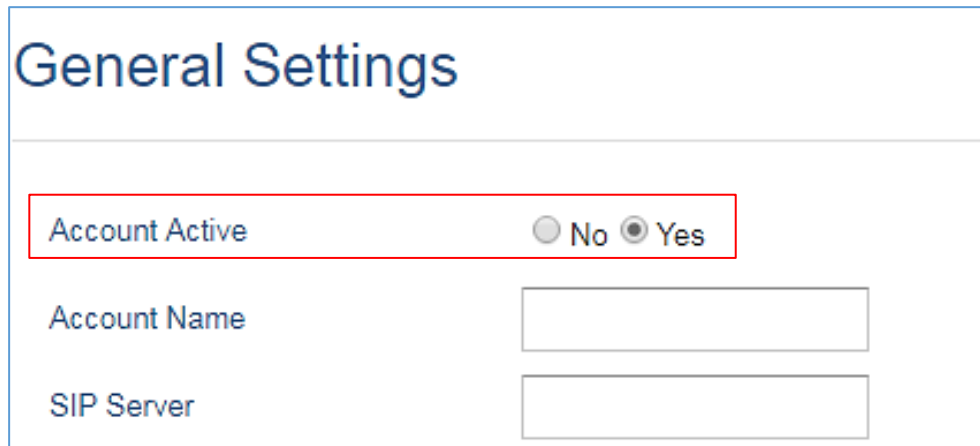
The screenshot shows the 'Phone Settings' menu on the left, with 'Phone Settings' selected. The main area displays various settings: 'DNS Cache Duration(m)' set to 30, 'SIP TLS Certificate' (empty), 'SIP TLS Private Key' (empty), 'SIP TLS Private Key Password' (masked with dots), 'Enable Direct IP Call' (checked, highlighted with a red box), and 'Enable two-way SIP Calling' (unchecked).

Figure 4: Enable Direct IP Call

GSC3570 Configuration Settings

The GSC3570 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 GSC3570 in order to interconnect with the GDS3710.

1. Access GSC3570 Web GUI→**Account**→**General Settings** and set “Account Active” to **Yes**, then click on  button to apply the new changes.



The screenshot shows the 'General Settings' page. The 'Account Active' section has radio buttons for 'No' and 'Yes', with 'Yes' selected (highlighted with a red box). Below are input fields for 'Account Name' and 'SIP Server'.

Figure 5: GSC3570 Account(x) Settings

2. Navigate to **Account**→**SIP Settings** and verify that the **Local SIP Port** configured on the GSC3570 is the same as the one on the GDS3710.

Note: Make sure the option “Use Random Port” is set to “No” under **Settings** → **General Settings**



Basic Settings

TEL URI	☒ Disabled ☐ User=phone ☐ Enabled
SIP Registration	☐ No ☒ Yes
Unregister on Reboot	☒ No ☐ All ☐ Instance
Register Expiration	60
Subscribe Expiration	60
Reregister before Expiration	0
Enable OPTIONS Keep Alive	☒ No ☐ Yes
OPTIONS Keep Alive Interval	30
OPTIONS Keep Alive Max Lost	3
Local SIP Port	5060

Figure 6: 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_NO_SIP**".
 - Specifies the **System Number** which is the GDS3710 number, the system number used in our example is **192.168.5.114**.
 - Configures the **Access Password** for opening Door 1 or Door 2 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**".



Grandstream Door System									
Order	Service Type	Account	System Identification	System Number	System IP Address	Door 1 Name	Door 1 Access Password	Door 2 Name	Door 2 Access Password
1	GDS ▼	Account 1 ▼	GDS3710_NO_SIP	192.168.5.114	192.168.5.114	Door1		Door2	
2	GDS ▼	Account 1 ▼							
3	GDS ▼	Account 1 ▼							
4	GDS ▼	Account 1 ▼							
5	GDS ▼	Account 1 ▼							
6	GDS ▼	Account 1 ▼							

Figure 7: GDS3710 Configuration Settings on GSC3570

- Press Save and Apply button to apply the new settings.

Note: The GSC3570 supports up to 10 GDS3710 items.



OPEN DOOR FEATURE

Once GDS37xx and GSC3570 paired together as described in the previous sections, the remote open door can be performed from the GSC3570 upon receiving a call from GDS for example when the doorbell button is pressed (Direct IP call). Also users have the possibility to open door remotely via GSC3570 without SIP/Direct IP call (Supported ONLY in GDS3710).

Open Door via GSC3570 during SIP/Direct IP with GDS37xx

To perform the remote open door from GSC3570 while on call with GDS, Press the door icon as shown in below example figure.

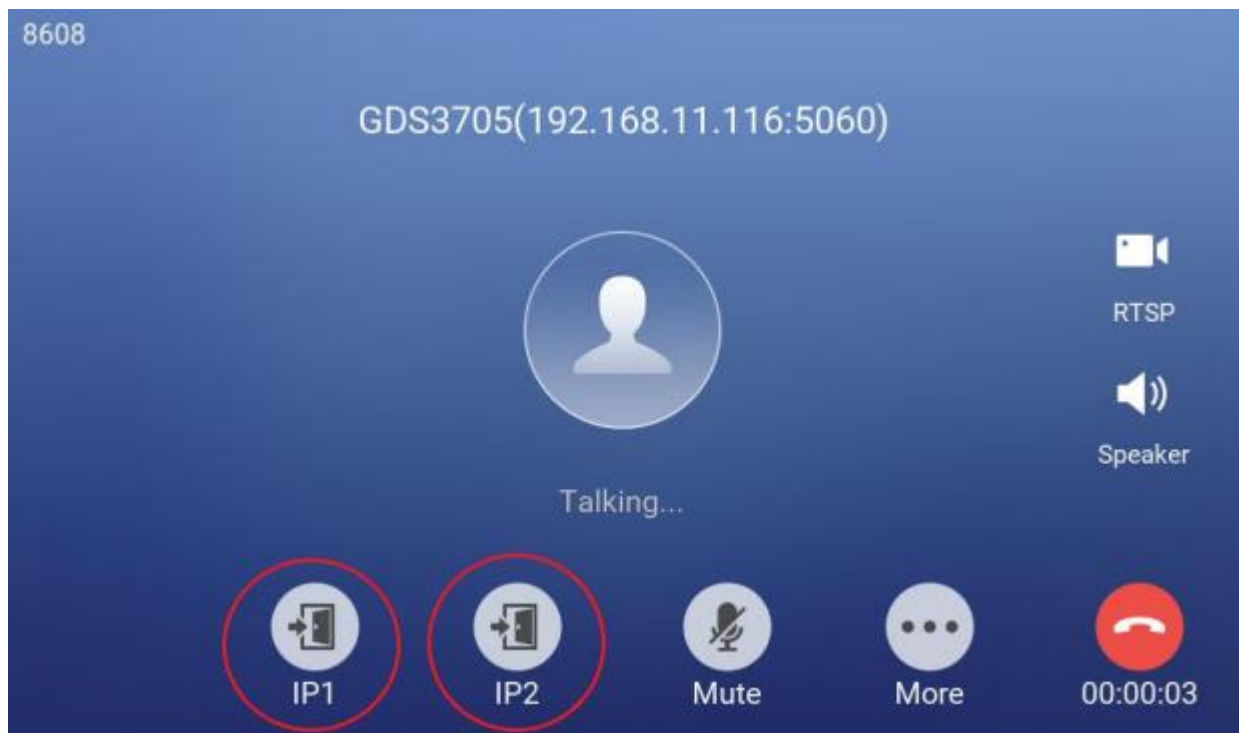


Figure 8: GSC3570 remote open door during call with GDS3705

Open Door via GSC3570 without SIP/Direct IP call (GDS3710 Only)

As mentioned before, users can also perform remote open door from GSC3570 even without being on call with the GDS3710, this will help customers with installation scene where GSC3570 is located near receptionists or related person, the user just use GSC3570 to operate GDS3710 to open door, without making a SIP call.



From the LCD touch screen of GSC3570, press “**Monitor**”, select “**Door system**”, then you can select the desired door to be opened as shown in below screenshot where the door for *GDS3710_NO_SIP* is selected.



Figure 9: GSC3570 LCD screen - Door system

Note: If you press the phone icon (green square illustrated above), then the GSC3570 will make SIP phone call to the configured GDS37xx and open door remotely via SIP phone call like as before.

