



# Grandstream IP Door Phone Solutions Overview

## Overview

The Grandstream (GDS) IP Door Phone Facility Access System tracks and manages access to any physical building and provides a dedicated audio and/or video intercom while also offering powerful integration with Masergy Global UCaaS Polycom and Cisco MP Phones. There are two IP Door Phone models to choose from:

- GDS3705 – IP Audio Door System (Audio only)
- GDS3710 – IP Video Door System (Video and Audio)

## GDS3705 – IP Audio Door System

The GDS3705 was built for users looking for a strong audio-only facility access and security monitoring solution that can be deployed in environments of all sizes. This audio door system features dual microphones and HD loudspeaker with advanced acoustical echo cancellation (AEC) to offer intercom functionality, can support SIP calls to IP phones and has a built-in RFID<sup>^</sup> chip reader and keypad for secured keyless or key entry. The GDS3705 comes equipped with a zinc alloy metal casing, making it weatherproof and vandal resistant and offers alarm-in\* and alarm-out\* support for integration with existing security devices. The GDS3705 integrates with Grandstream's free management utility software, GDS Manager, allowing RFID<sup>^</sup> card information, as well as the device itself to be fully managed by this software.

## Features

- HD audio options with up to 1.5m of audio input and 3m of audio output
- Built-in RFID<sup>^</sup> chip reader for keyless entry
- Supports SIP calls to IP phones to facilitate communication
- Built with a metal casing to make it weatherproof and vandal resistant
- Integrated PoE to power the device and provide a network connection
- Built-in dual microphone and HD loudspeaker with advanced AEC offers intercom functionality



## GDS3710 – IP Video Door System

The GDS3710 is an IP Video Door System that also serves as a high-definition IP surveillance camera and IP intercom to offer facility access

# HD IP Video Door System GDS3710

control and security monitoring for buildings of all sizes. This powerful IP Video Door System offers a 180-degree video viewing angle for wall-to-wall coverage, has a built-in RFID\* chip reader for secure keyless entry, includes a built-in microphone and speaker to support intercom functionality and offers alarm-in\* and alarm-out\* support for integration with existing security devices. The GDS3710 integrates with Grandstream's free management utility software, GDS Manager, allowing RFID\* card information, video feeds as well as the device itself to be fully managed by this software.

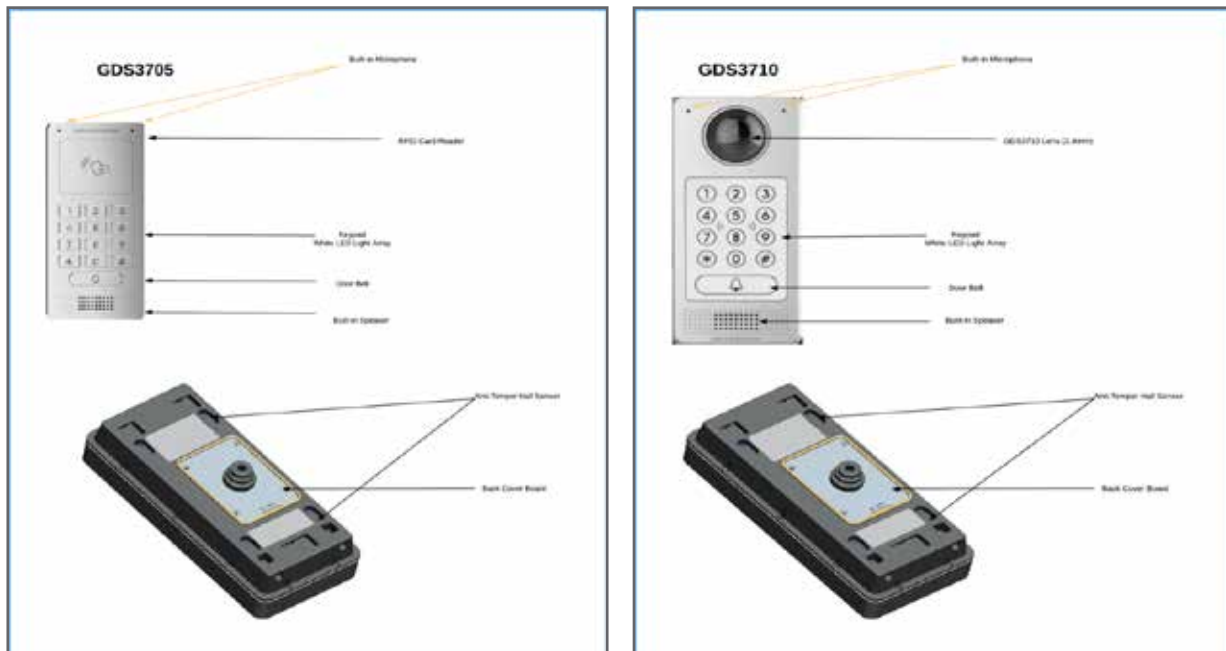
## Features

- Powerful video resolutions up to 1080p
- Built-in RFID\* chip reader for keyless entry
- Video intercom stations and IP phones simultaneously.
- Built with a metal casing to make it weatherproof and vandal resistant
- Built-in hemispheric camera allows for 180-degree wall-to wall coverage
- Supports motion detection
- Integrated PoE to power the device and provide a network connection
- Built-in microphone and speaker offers voice options and intercom functionality
- ONVIF Profile S compliant  
(ONVIF is a global and open industry forum with the goal of facilitating the development and use of a global open standard for the interface of physical IP-based security products. ONVIF creates a standard for how IP products within video surveillance and other physical security areas can communicate with each other.)



**\*Note: RFID and Alarm devices are not supported by Masergy and any deployment of RFID and Alarm devices are the customer's sole responsibility.**

## IP Door Phone Device Layouts



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## UCaaS Deployment Options

Masergy Global UCaaS provides two options on how to deploy the Grandstream (GDS) IP Door Phone Solution with your business environment. The GDS IP Door Phone can be assigned for up to 4 individuals for concurrent notification or by using a hunt group which allows more individuals to be notified. Masergy's recommended best practice would be to utilize a hunt group.

The individuals or members of the hunt group would need to be white listed into the GDS IP Door Phone to allow only these individuals the ability to signal the door phone to allow entry into your business facility. Any other person calling the IP door phone would be denied access for security purposes. Depending on the UCaaS services you wish to use with the IP door phone solely depends on which User License is assigned to the device. Normal practice is to use a Utility Line User license and a Hunt Group.

Masergy staff can assist you with choosing which user license to assign to the IP door phone, the programming of the GDS IP Door Phone, and any other UCaaS services you might need.

## Scheduling For Hours of Operation

The GDS IP door phone supports scheduling hours of operation and holidays. The time schedules can be another layer of security for your business which would prohibit access to your facility when you are closed.

## Installation of the GDS System

Since GDS IP Door Phone deployments usually require integration with electrical systems in order to open doors, we recommend they be installed by a licensed electrician. Many electricians have experience working with door systems, and many installers are also licensed electricians.

### 1. Physical installation: In-wall installation or on-wall installation

There are 2 main ways to install GDS Door Phone devices in any location: on wall, in which the device will extend out from a wall, or in-wall, in which the device will be mounted flush within the wall. All models include the on-wall kit, while the in-wall kit is available for separate purchase.



On-Wall In-Wall

### 2. Add it to your network and configure based on desired solution

Add the GDS device to your SIP network and set it as an extension (if desired) to allow it to communicate with other endpoints on your network. Then, use GDS Manager, to program PIN codes, RFID^ cards, access rules, time schedules, intercom structure, etc.



### For detailed installation instructions:

[GDS3705 User Manual](#)

[GDS3710 User Manual](#)

[GDS3705 Quick Installation Guide](#)

[GDS3710 Quick Installation Guide](#)

The GDS Door Phone In-Wall Mounting Kit offers a flush mount within a wall rather on the surface of the wall. It supports solid wall, stud and drywall (hollow wall) installation. Please follow local building and electrical code. It is suggested that the mount be installed with the bottom of the GDS device 50-55 inches above the ground.

Required In-Wall Space 99.8mm (3.93 inches) x 193.88mm (7.63 inches), 35mm deep (1.38 inches)

[GDS In-Wall Mounting Guide](#)



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## GDS IP Door Phones - Network and Door Strike Connection Wiring Overview

The Grandstream IP Door Phone products does not have a built-in RJ45 connector for network connectivity; therefore, we need to use Cat5e or above cable standards to make connections to the network switch.

Grandstream IP door phones have a connector terminals (shown in the images below) that allows us to connect to the network switch, door electric strike plate, alarm\* system (door alarm), providing power to the unit, and access control devices “Wiegand”. This connection terminal has multiple Junction connectors (J2, J3, J4) built on it which each one has a specific purpose.

- **Jack 2: This connector is used for Ethernet connection PoE, provide power to the unit in case there is no PoE switch available.**
- **Jack 3: This connector is used for door Alarm\* in/out and connection to Electric door strike/Lock.**
- **Jack 4: This connector is used for connection the door phone unit to Access Control Devices using Wiegand wiring.**

Jack	Signal	Function	Note
J2 (Basic) 3.81 mm	TX+	Ethernet PoE 802.3af Class 3, 12.95 W	Orange/White (Data)
	TX-		Orange (Data)
	RX+		Green/White (Data)
	RX-		Green (Data)
	PoE_SP2		Blue + Blue/White Please twist these two wires together and connect to SP2 even the PoE not used.
	PoE_SP1		Brown + Brown/White Please twist these two wires together and connect to SP1 even the PoE not used.
	RS485_B	RS485	
	RS485_A		
	GND	Power Supply (PSU)	DC 12V, 1A Minimum
12V			

J3 (Advanced) 3.81 mm	GND	Alarm GND	
	ALARM1_IN+	Alarm In	V In < 15 V
	ALARM1_IN-		
	ALARM2_IN+		
	ALARM2_IN-		
	NO1	Alarm Out	Relay: 30 VDC/2A: 125 VAC/0.5A
	COM1		
	NO2	Electric Lock	For “Fail Secure” (Locked when Power Lost) Strike, connect COM2 & NO2 (Normal Open).
	COM2		
NC2	For “Fail Safe” (Open when No Power) Magnetic Lock, connect COM2 & NC2 (Normal Close).		
			Relay: 30 VDC/2A: 125 VAC/0.5A

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J4 (Special) 2.0 mm	GND	Wiegand Power GND	Black Both Input and Output MUST be connected
	WG_D1_OUT	Wiegand Output Signal	Orange GDS3710 function as Output of Card Reader, connect Pin 1,2,3
	WG_D0_OUT		Brown For External Card Reader, Or GDS3710 as Receiver Only
	LED	Wiegand Output LED Signal	Blue For External Card Reader, Or GDS3710 as Receiver Only
	WG_D1_IN	Wiegand Input Signal	White For External Card Reader, Connect Pin 1,4,5,6,7,8
	WG_D0_IN		Green For External Card Reader, Connect Pin 1,4,5,6,7,8
	BEEP	Wiegand Output BEEP Signal	Yellow For External Reader Only
	5V	Wiegand Power Output	Red For External Card Reader Only. 12 V DC powered External Card Reader must use own power source, can NOT use this Pin.

## Ethernet Connection:

To connect the GDS3710 or GDS3705 by using Power over Ethernet (PoE) or Power Supply (PSU) follow steps below.

- Open the back-cover board of the GDS3710 or GDS3705 which should look like the figure 1 & 2.
- Cut into the plastic sheath of your Ethernet cable, then Unwind and pair as shown below. Use the TIA/EIA 568-B standard, which define pin-outs for using Unshielded Twisted Pair cable and RJ-45 connectors for Ethernet connectivity
- Connect each wire of the cable to its associate on the Back Cover of the GDS3710 or GDS3705 to power the unit using PoE
- To power the unit using PSU, use a multi-meter to detect the polarity of your Power Supply, then connect GND to negative pole and 12V to positive pole of the PSU

**Note: If the customer doesn't have a PoE switch, there is no need to connect the Blue and Brown wires to the GDS3710 or GDS3705 since these wires are used to power the unit via Ethernet.**

Figure 1



**GDS3710** Connector Terminal  
Ethernet Network Portion

Figure 2



**GDS3705** Connector Terminal  
Door Strike Portion

Figure 3



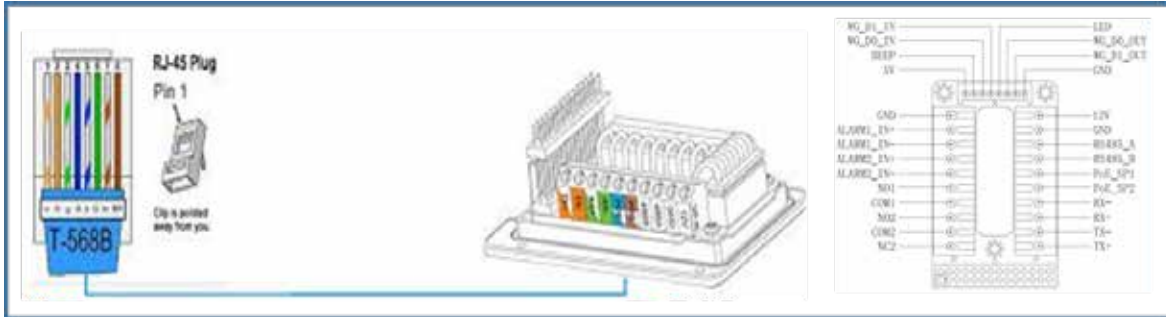
**GDS3710** Connector Terminal  
Door Strike Portion

Figure 4

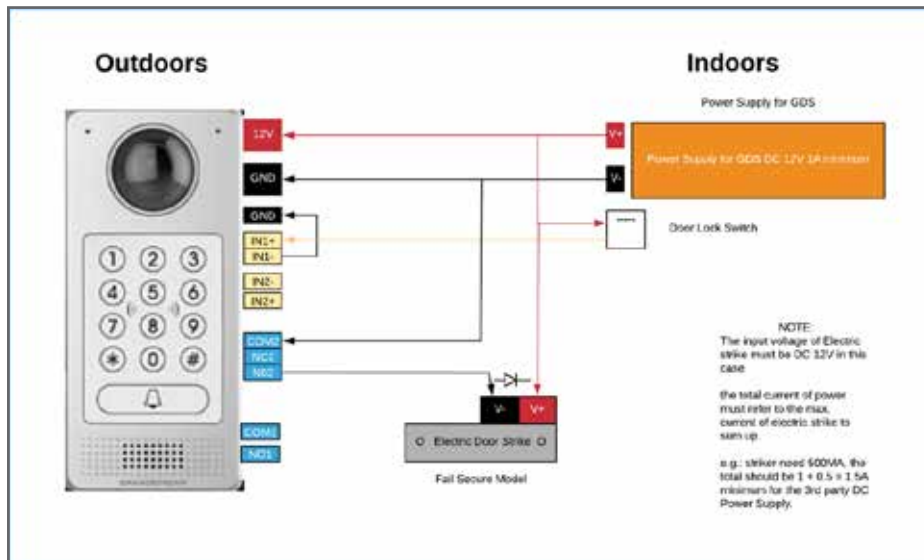


**GDS3705** Connector Terminal  
(above view)

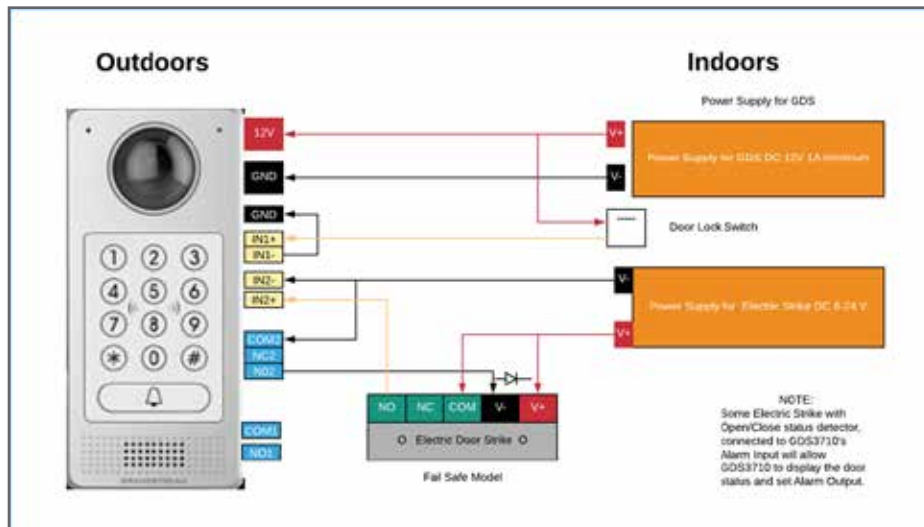
# HD IP Video Door System GDS3710



GDS3710 & GDS3705 Connection & Wiring Diagrams – “Fail Secure” Electric Strike, 3rd Party Power Supply

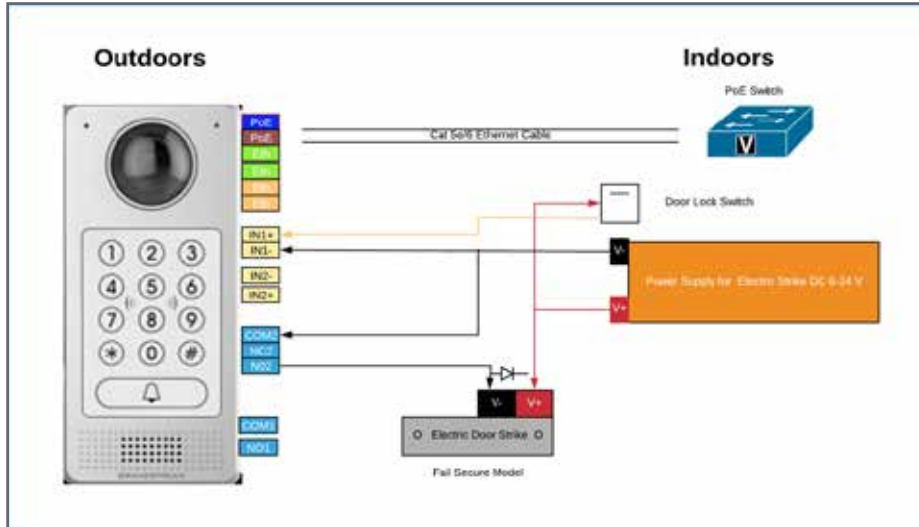


GDS3710 & GDS3705 Connection & Wiring Diagrams – “Fail Safe” Electric Strike, 3rd Party Power Supply

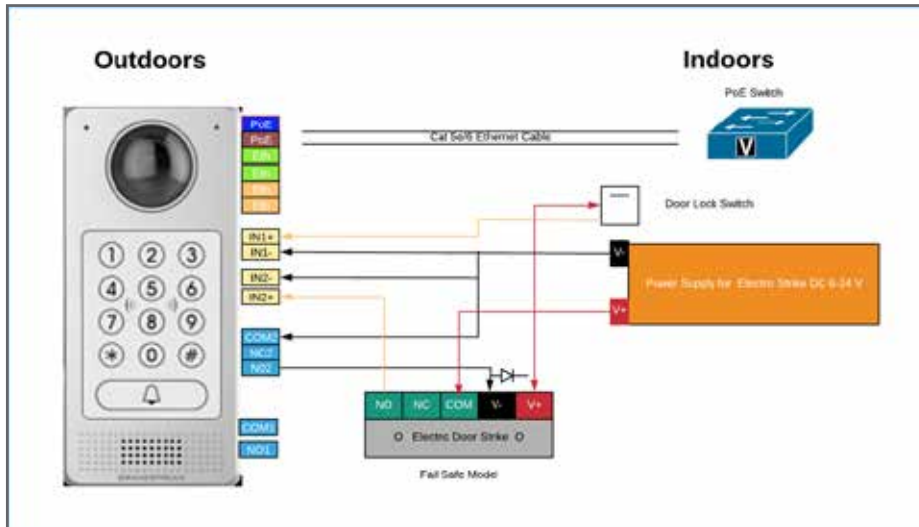


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GDS3710 & GDS3705 Connection & Wiring Diagrams – “Fail Secure” Electric Strike, PoE Switch



GDS3710 & GDS3705 Connection & Wiring Diagrams – “Fail Safe” Electric Strike, PoE Switch



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For additional information please visit [Grandstream Support](http://Grandstream Support) web site.