



DP-GSM

DOOR INTERCOM AND ACCESS CONTROL UNIT
OPERATING ON 2G AND 3G MOBILE NETWORKS



TABLES OF CONTENTS

1	INTRODUCTION.....	3
2	APPLICATION AREA	3
3	FEATURES.....	3
4	ADVANTAGES.....	3
5	CONNECTION DIAGRAM	4
6	OPERATION	4
6.1	Visitor mode.....	4
6.2	Listen-in mode	4
6.3	Gate control by free call.....	5
6.4	Gate control during the call	5
6.5	Gate control by mobile App	5
7	SETTING WITH MS WINDOWS APPLICATION.....	5
7.1	Module Status.....	6
7.2	Modem and GPRS settings.....	6
7.3	Doorphone settings	7
7.4	Administration section	8
7.5	Gate control setting.....	8
7.6	Last events.....	8
8	REMOTE SETTING WITH WEB BROWSER.....	9
8.1	User account registration on the WEB server	9
8.2	Adding device ID to account.....	9
9	INSTALLATION.....	10
9.1	Putting into operation	10
9.2	Mounting.....	10
10	SETTING UP AND USING THE PULOWARE MOBILE APPLICATION	10
11	TECHNICAL SPECIFICATION.....	11
12	PACKAGE CONTENTS	11
13	SOFTWARE COMPONENTS	11
14	CONTACTS	11

1 INTRODUCTION

The **DP-GSM** is an intercom unit which as a cell phone can call the owner's mobile or landline phone. By pressing the call button on the intercom, it makes the voice connection in a few seconds, just like when talking via a conventional intercom system. This way it makes possible for the owner to receive the visitor's calls and talk to them at anytime and anywhere, even when not at home.

The unit does not need any special installation or complicated wiring it needs power only and an active SIM card.

2 APPLICATION AREA

- Modern solution for wireless intercom system (private homes, resorts, offices, premises)
- Remotely controllable access control unit
- Keyless door opening
- Garage door opening/closing by phone
- AIRBNB house access control

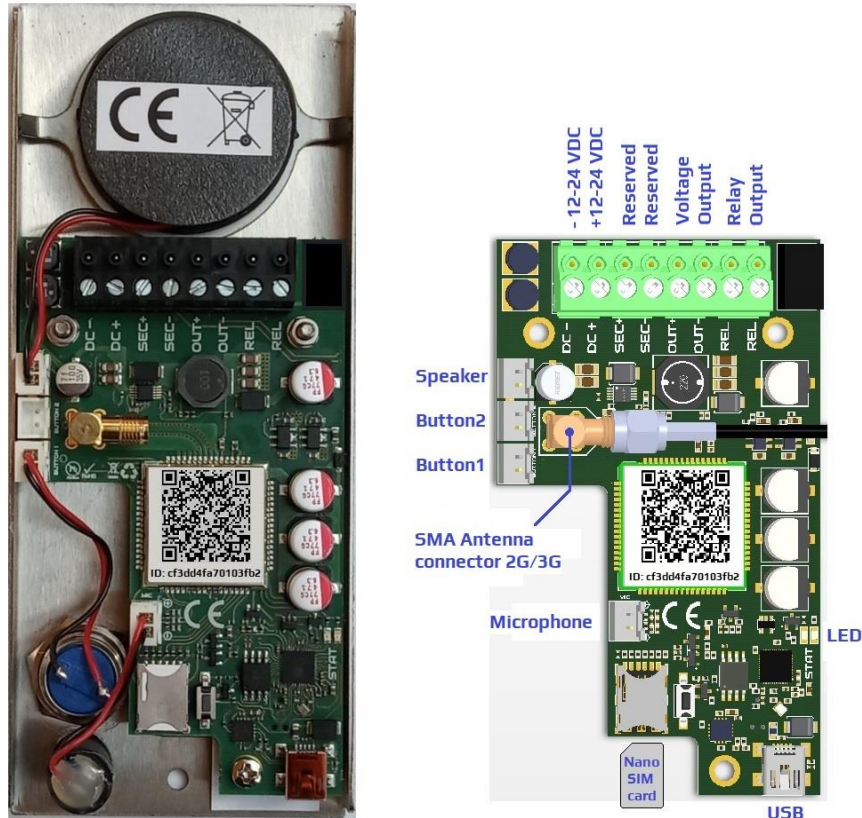
3 FEATURES

- Compact and vandal-proof stainless steel case
- Surface or Flush mounting appearance
- 1 or 2 call buttons
- GSM (2G) and UMTS (3G) network compatibility
- Remotely controlled RELAY for gate opener
- Remotely controlled Voltage Output (1A) for electric lock driving
- Local setup via USB with PC progs
- Remote management and configuration via WEB
- Smartphone App
- Remote firmware update possibility
- Operating temperature: -30°C / +60°C
- Protection: IP54

4 ADVANTAGES

- Excellent sound quality
- Easy to install and setup
- Gate controlling by free call or by mobile App
- With mobile App can be setting temporary authority for the guest to controlling the gate
- No missed clients or visitors, since the intercom unit calls the owner's mobile phone

5 CONNECTION DIAGRAM



6 OPERATION

6.1 Visitor mode

When the visitor pushes the call button, the device initiates a voice call to the configured phone number. If the called party accepts the call, the communication establishes for the configured duration. During the call, the connection cannot be interrupted nor by making a call to the device, nor by pressing the button again. The call is ended automatically when the configured communication time expires, or the called party can hang up the call at anytime on his/her phone. The call is ended automatically if the called party does not answer or is not available.

If both phone numbers are set for call button, the unit calls the primary phone number first. In case of an unsuccessful call (e.g. if the called number is not available, busy or the call is not accepted), the unit calls the secondary phone number.

6.2 Listen-in mode

The intercom unit can be called from the telephone numbers assigned to the telephone's push buttons. Of course rejects initiated call from all other phone numbers. In this case the unit accepts the call without ringing and the voice connection establishes. The call can be ended on the caller's phone or by pressing the call button on the unit.

⚠ Notice: If the call is initiated from a phone number which is configured in the unit as gate control number, the device will consider the call as a gate opening call. In this case voice connection is not established, but the relay output is activated.

6.3 Gate control by free call

When incoming any call for gate controlling, after identifying the caller ID, the unit rejects the call and if it authorized then activates the adjusted output (relay or voltage output) to the given period. The OUT+/- voltage output can be used for the direct driving for electric lock. The output voltage is almost equal with the supply voltage, which provides easy usability with 12VDC systems. The output is protected against short circuit and overcurrent, thereby the output turns off upon overcurrent and becomes operable again after the termination of the fault.

6.4 Gate control during the call

During the call by pressing "1" of the phone's numbered keys OUT output while "2" Relay output can be activated exclusively by the owner.

6.5 Gate control by mobile App

The intercom's relay and door lock output can be controlled by Android or IOS App. For more information, see the chapter of PULOWARE mobile App setup.



7 SETTING WITH MS WINDOWS APPLICATION

The intercom unit parameters (phone numbers, controls) can be set using the **Dupol Configurator** software. First please download the configurator:

<https://dupol.eu/documents/DupolConfiguratorSetup.exe>

After install and run the program, connect the USB port of the GSM Intercom to the PC using the supplied cable and run the **Dupol Configurator** software!

The screenshot shows the DU-POL Configurator v1.6 software interface. It has a blue header bar with the title "DU-POL Configurator v1.6". The main area is divided into several sections. On the left, there's a "MODULE STATUS" section with a table showing connection details (UMTS (3G) vodafone HU), network signal (41%), and call button status (all INACTIVE). Below this is a "MODEM AND GPRS SETTINGS" section with fields for PIN code, GPRS APN (internet.vodafone.net), User, and Password. On the right, there's a "LATEST EVENTS" section showing a log of events like "Phone off", "Phone on", and "PHONE READY!". Below the events is a "DOORPHONE SETTINGS" section with "CALL BUTTON 1" and "CALL BUTTON 2" settings, each with primary and secondary phone number fields. At the bottom right is a "GATE CONTROL SETTINGS" section with a table for user settings (Name, Phone number, OUT RELAY) and buttons for "Add new" and "Delete selected". The "GENERAL SETTINGS" section at the bottom left of the right pane includes fields for incoming SMS forward number, ring and call times, switching times (all set to TEST), backlight intensity, and audio profile (Normal volume).

7.1 Module Status

Displays information about the switching state of the peripherals and the actual status of the mobile network.

Displays the type of connection 2G or 3G and the value of the network signal (0-100%) The appropriate GSM signal is minimum 30%.

Displays information on the state of the intercom's buttons (upper and lower).

Displays the state of the relay and voltage output control.

MODULE STATUS	
Connection:	UMTS (3G) vodafone HU
Network signal (%):	41%
Call button 1:	INACTIVE
Call button 2:	INACTIVE
OUT:	INACTIVE
RELAY:	INACTIVE

7.2 Modem and GPRS settings

In this section can be setup the data connection of mobile network. For using the remote management and mobile App the mobile data connection is necessary!

Enter the valid PIN code if necessary or leave empty if not.

Enter the SIM card provider Access Point Network name for mobile data connection. Enter User and Password if necessary.

MODEM AND GPRS SETTINGS	
PIN code:	
GPRS APN:	internet.vodafone.net
User:	
Password:	

7.3 Doorphone settings

In this section can be setup the parameters of peripherals and audio profile.

The intercom unit calls the phone numbers entered here when the appropriate button is pressed. If both phone numbers are given to button, the unit calls the primary phone number first. In case of an unsuccessful call (e.g. if the called number is not available or the call is not accepted), it calls the secondary phone number automatically.

SMS forward: Forwards an SMS received messages on the unit's SIM card to the specified phone number, e.g. balance information received from the GSM service provider. It is recommended to configure this in case of using a pre-pay type SIM card.

Ring time: (10-120 sec) The maximum time allowed for ringing from pushing the call button. This function is useful to avoid switching to voicemail.












Call time: (10-600 sec) The maximum allowed duration for a call initiated from the intercom.

OUT switching time: (1-120 sec, monostable)
The voltage output activation time. The voltage output, e.g. for direct control of an electric lock.

RELAY switching time: (1-120 sec, monostable)
The relay contact output activation time

Backlight intensity: (0-10)

Audio profile: (Low / Normal / High volume)
Select the appropriate volume for your environment.

DOORPHONE SETTINGS	
CALL BUTTON 1	
Primary phone number:	+36301234567
Secondary phone number:	
CALL BUTTON 2	
Primary phone number:	
Secondary phone number:	
GENERAL SETTINGS	
Incoming SMS forward number:	+36301234567
Ring time (sec):	20  
Call time (sec):	60  
OUT switching time (sec):	TEST 5  
RELAY switching time (sec):	TEST 5  
Backlight intensity:	TEST 5  
Audio profile:	Normal volume 

7.4 Administration section

These menu section serve for reading, writing, saving etc. the settings. Using the functions displayed in the below picture it is possible to download the settings to the unit's memory and, as well as save settings to PC or open and edit a file with the existing settings.



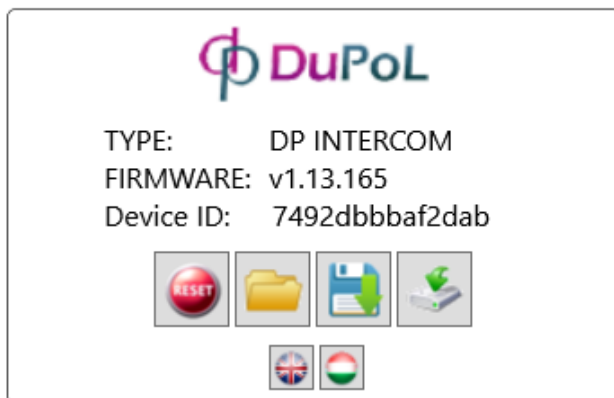
Open and edit the saved settings.



Save settings to PC.



Download the edited settings to the unit's memory for validation!



7.5 Gate control setting

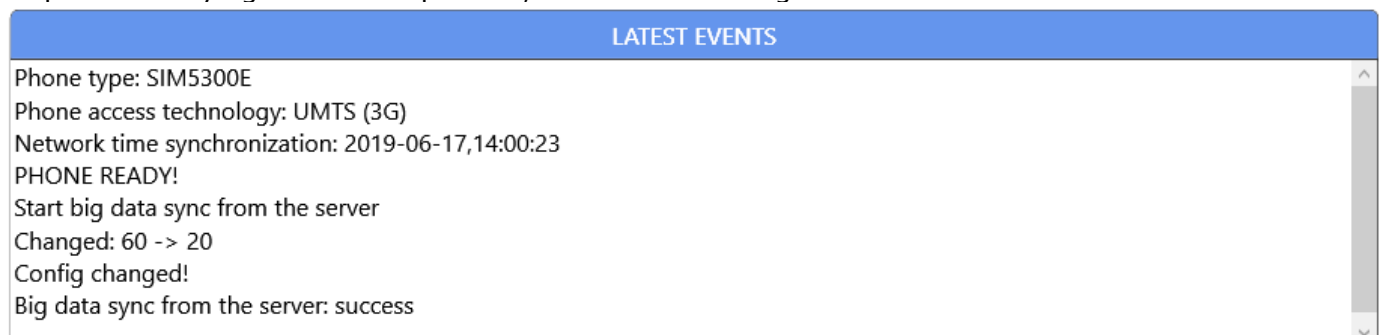
In this section can be set the user's phone numbers who able to controlling the RELAY and/or OUT by free call.

Maximum 100 user phone numbers can be added.

GATE CONTROL SETTINGS			
	Name	Phone number	OUT RELAY
<input type="checkbox"/>	User1	+36701234567	<input type="checkbox"/> <input checked="" type="checkbox"/>
<input type="button" value="Add new"/>		<input type="button" value="Delete selected"/>	

7.6 Last events

The messages shown in this window give information about the internal operation of the unit. This helps in identifying an internal process, an incorrect configuration or other malfunction.



8 REMOTE SETTING WITH WEB BROWSER

The settings of intercom is remotely modified via internet. For using this remote management function, the mobile data connection is necessary! The settings are available at **www.puloware.com** where the full configuration of the DP-GSM is shown in the same way as in the PC program.

 **Notice, the function and the use of the website are free but require registration!**

After logging into the registered account, the device ID of the intercom must be added to the list so that the settings of the device can be seen and modified on the interface! The identifier can also be found on the PCB and on the warranty card.

8.1 User account registration on the WEB server

The first step is to register a user account on the server. You only need to do this step once, and you can add an unlimited number of devices to your account. The server address is: **www.puloware.com** When registering a user, the server does not request any personal information.

 **Notice, since login information is not recoverable from the system, you will need to register a new account if you forget your password or email address!**

 **Notice, the account password is not the same within the application, with the password for the devices!**

8.2 Adding device ID to account

 **Notice, before you add device ID to account, make sure the intercom is turned on and data connection is successful!**

Log in to the created account and push the “+ **ADD DEVICE**” button. Enter the device ID and no enter password.

The device ID is a 16-digit character (combination of letters and numbers) that uniquely identifies the devices.

 **Notice, this is the only way to access the intercom via both the WEB and the mobile application, so treat the ID confidential!**

The web setup screen is the same as the **Dupol Configurator** software.

9 INSTALLATION

9.1 Putting into operation

- Make sure the SIM card is inserted properly into its holder. See the connection diagram.
- Make sure the antenna is fixed properly to the SMA connector.
- Make sure the wires are connected as shown the connection diagram.
- Make sure the power supply is sufficient for the operation of the unit! If it is, and all connections are done, the unit can be powered up.

⚠ Notice, when operated with an electric lock, the minimum power requirement is 15VA!

9.2 Mounting

- Do not mount the unit where it could be affected by strong electromagnetic disturbances.
- Antenna: the cellular network antenna supplied with the unit provides good transmission under normal reception circumstances. In case of having signal strength problems use higher gain antenna or find a more suitable place for the antenna.

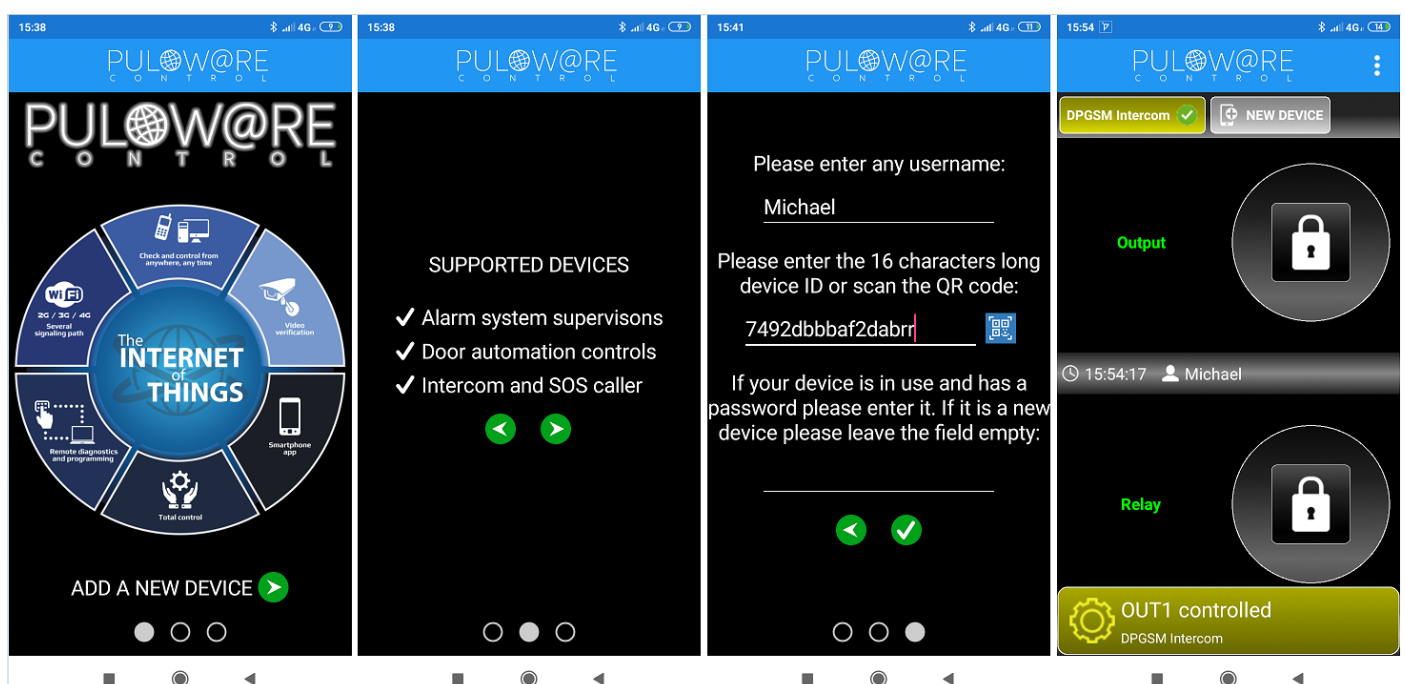
10 SETTING UP AND USING THE PULOWARE MOBILE APPLICATION

The intercom's relay and door lock output can be controlled by Android or IOS App. The PULOWARE mobile app can be downloaded from Google Play or the Apple App Store. After launching the application, the setup wizard request the operator's (or user's) name, the intercom device ID and the ID's password. The device ID is a combination of a 16-digit letter and number on the sticker on the panel that is the unique identifier of the unit in the system.

⚠ Notice, there is no password for the new device, so please leave the field blank!

The password can be set on www.puloware.com in the device account.

Download and launch the PULOWARE application and enter the appropriate data.



11 TECHNICAL SPECIFICATION

Name	Other conditions	Minimum	Typical	Maximum	Unit
Power supply (DC_IN)		9	12	15	VDC
Current consumption	in case of 12VDC	50	100	1500 *	mA
Relay output load				30	V
				5	A
Voltage output			DC_IN - 1V		V
				1	A
Operating temperature		-30		+60	°C
Outdoor protection				IP54	
Network communication		UMTS:900/2100 GSM:900/1800			MHz
Dimensions		65x155x35			mm

* when the unit drive the door lock

12 PACKAGE CONTENTS

- DP-GSM intercom front plate (with 1 or 2 call button)
- Mounting frame
- Safety screw + bit
- Cellular network antenna
- USB cable
- Antenna bracket + fixing screws
- User manual
- Power supply

13 SOFTWARE COMPONENTS

- Dupol Configurator (v1.6 or higher) <https://dupol.eu/documents/DupolConfiguratorSetup.exe>
- PULOWARE control mobile App play.google.com or apps.apple.com
- PUOWARE WEB server <http://puloware.com/>

14 CONTACTS

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