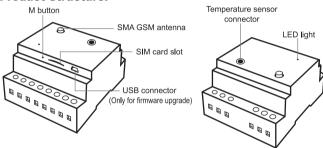


#### Product Instruction:

SimPal-D210-V2 DIN-Rail GSM Power Control: Use a GSM SIM card to remotely control the power on/off. Built-in power adapter, 110-250V power input, 12V and 110-250V power output. Two-lines wired sensor and one temperature sensor are supported.

### Product Structure:



### Power Control connector:





Output: (110-250V AC) Input: (110-250V AC)

L: Live line output
N: Negative line output
G: Ground line output

L: Live line input
N: Negative line input
G: Ground line intput



12V output and alarm sensor input: 12V: Constant 12V DC output (Max 200mA)

S1: Wired sensor-1 input, NO/NC type

S2: Wired sensor-2 input, NO/NC type
12V(C): Controllable 12V DC output (Max 200mA)

### Start to use:

(Important notes: Cut off power supply when wiring cables)

- 1. Connect the GSM antenna onto connector.
- 2. Install SIM card, put the SIM card metal contact upside and cut corner at the left. Hardly push the SIM card until it locked inside the SIM card slot.
- 3. Connecting wired sensor, temperature sensor. (If necessary)
- 4. Connecting 110-250V AC power input and output, make sure power supply is cut off when wiring the cable.
- 5. Connect the 110-250V AC power, then device start to working. The LED will light on within 3-5 seconds after power connected.

### Download "SimPal GSM" APP

We offer free APP to work with SimPal-D210-V2, search "SimPal GSM" on Google Play or Apple APP Store, download and install the APP, then it can use APP to control SimPal-D210-V2.

First time register device on APP, input device name and SIM card number which installed on SimPal-D210-V2 device. The APP will create SMS content, send the SMS to device, it will operate according APP function description.

Even without APP, user also can edit and send SMS command manually according following instruction to control the device.

## • Register phone number

Max allow 5 numbers to control the device, one Master number and four Users. Master have full authorization to configure the devices, User number only can be added by Master number. All configurations are process by sending SMS to device SIM card. The SMS format is #code-1#code-2#. The detail command as following:

Register Master number: #00#
Add User number: #06#User-number#
Deleted User number: #15#User-number#

If device replied "Master number already exist", then it needs to reset the device factory settings. Keep press M button for 10 seconds, it will reset the device.

# • Voice call to turn on/off power

Master or User number call the device SIM card number, it can turn on/off 230V power or turn on power for some seconds. The command to change settings as following:

Calling to turn on/off power function - ON (default): #09#1#

For example: current 230V power is on, when user calling, it will turn off power; calling again, it will turn on power.

Calling to turn on power for some seconds: #09#2#time#
Time parameters is 1-1800, it means duration 1-1800 seconds.

Calling control - OFF: #09#0#

Default it does not send SMS when calling turn on/off power, it can send SMS to enable send SMS.

SMS when calling control - ON: #41#1#

SMS when calling control - OFF (default): #41#0#

Allow any number calling control - ON: #31#1#

Allow any number calling control - OFF (default): #31#0#

### Power on/off

Master or User send SMS to turn on/off 230V power or DC 12V power:

Turn on 230V power: #01#0# Turn off 230V power: #02#0# Turn on DC 12V: #42#01# Turn off DC 12V: #42#00#

### Delay control

Set the 230V power auto turn on/off for some minutes. Master or User send following SMS to:

Turn on power for some mintues: #12#0#time#0#

Turn off power for some minutes: #12#0#time#1# (Time range is 1-720, it means 1-720 minutes)

Delay control function will auto stop when manually on/off power.

### Schedule control

Set the 230V power auto on/off according setting schedule, Master or User send following SMS to:

Set schedule turn on power parameters: #20#0#ID#day#start-time#end-time#
It will turn on power when it reaches the setting time.

- ID: range 1-3, means three group schedule control.
- Day: one digit, the values lie in the range of "1" to "7".
- The following table contains the descriptions of each value:

| Value | Corresponding day | Value | Corresponding day |
|-------|-------------------|-------|-------------------|
| 1     | Monday            | 5     | Friday            |
| 2     | Tuesday           | 6     | Saturday          |
| 3     | Wednesday         | 7     | Sunday            |
| 4     | Thursday          |       |                   |

 StartTime and EndTime: Be consists of 4 digits (hh:mm) and works on a 24 hour clock. If StartTime bigger than EndTime, it will operate until next day EndTime.

For example: #20#0#1#1234567#2000#0800#, it means set group 1 schedule control, "Monday"-"Sunday", it will turn on power from 20:00 and turn off at 08:00 next day.

Set schedule control - OFF(default): #19#0#0#

Schedule control can be temporarily closed by send SMS or press button to change power status, but it will process schedule control again when reach next time point.

## Temperature control

When temperature sensor installed, it will display temperature value in SMS reply

Temperature control function mostly use when output power connected with heating or cooling device, it will auto turn on/off power according the temperature change. Master sends SMS to:

Set temp control parameters: #24#0#mode#low-temp#high-temp#

- Mode parameter can be 1 or 2, Warming mode is 1, cooling mode is 2;
- Temp range should be within -30 to 100 degree.

For example #24#0#1#15#25#, it means set thermostat control parameter, work with warming mode (Connected with heating device), turn on power when temperature lower than 15 degree, turn off when temperature higher than 25 degree.

Set temp control - ON: #23#0#1#
Set temp control - OFF(default): #23#0#0#

### Temperature alarm

Master set temperature range for device, when temperature out of range, it will send SMS to notify user of temperature change. Master or User send SMS to:

Set temperature alarm range: #22#0#low-temp#high-temp#

Temperature range is -30 to 100 degree.

Temperature alarm - ON: #21#0#1#

Temperature alarm - OFF (default): #21#0#0#

#### Wired sensor alarm

SimPal-D210-V2 support two wired sensor input, one constant 12V DC output, one controllable 12V DC output, Constant 12V DC can be work as power supply for wired sensors. The input sensor is NO/NC type (Normal Open or Normal Close). Need to connect wired sensor NO/NC and COM PIN onto S1 or S2 terminal. No allow connect power onto S1 or S2 terminal. It may burn device if connected DC/AC power onto S1 or S2 terminal.

SimPal-D210-V2 will send SMS when sensor trigger, it can send SMS to change the settings:

SMS when sensor alarm - ON (Default): #40#1# SMS when sensor alarm - OFF: #40#0#

Change sensor name: #43#sensor1#Sensor2#

Default sensor name is "Sensor-1" and "Sensor-2", Master can define own sensor name, such as #43#Door#Window#, then it will name sensor-1 "Door", name sensor-2 "Window". The name will included in alarm SMS.

Sensor default support both NO/NC mode, it can change alarm only one mode.

Change alarm mode: #44#sensor-number#mode#

Sensor number can be 1 or 2, means sensor 1 or sensor 2, mode can be 1, 2, 3. Mode 1 means only trigger when wired sensor CLOSE; 2 means only trigger when wired sensor CLOSE or OPEN.

Check wired sensor status: #44#

### Auto control power when sensor trigger

When wired sensor trigger, it can set to auto change power status, this can be use for home power smart control. For example, when wired sensor detect human motion, auto turn on power for some seconds. The command to set auto control power as following:

Sensor trigger, auto turn on 230V power: #42#220#time#
Time range is 1-1800, it means turn on power for 0-1800 seconds.

Sensor trigger, auto turn on 12V DC power: #42#12#time# Disable sensor control power function: #42#0#

Time range is 1-1800, it means when sensor trigger, auto turn on 12V DC power output for 1-1800 seconds.

When sensor trigger, it only can select turn on 230V or 12V DC power. Do not support turn on both 230V and 12V when sensor trigger.

# Advanced settings

### SMS when on/off button pressed

Default send SMS when M button pressed, Master send SMS to set:

SMS when on/off button pressed - ON (Default): #03#1# SMS when on/off button pressed - OFF: #03#0#

#### SMS when power lost or restore

Default sending SMS notify when main power supply lost or restore. Master send SMS to set:

Power lost or restore SMS - ON (Default): #05#1# Power lost or restore SMS - OFF: #05#0#

#### **Reset factory settings**

Reset factory settings if you want to change or forgot Master number. There are two methods to reset factory setting:

- Method 1: Master send following SMS to: Reset factory setting: #08#1234#
- Method 2: Keep pressing the M button for 10 seconds, it will long beep and reset factory setting.

### • SMS command list

| Category            | Function                                      | Command  |
|---------------------|---|--|
|                     | Register Master-number                        | #00#   |
| D-fi                | Add User-number                               | #06#User-Number#                                       |
| Define<br>the users | Check User number                             | #06#   |
| tile users          | Delete User-number                            | #15#User-Number#                                       |
|                     | Delete all User-number                        | #15#   |
|                     | Calling control power - ON                    | #09#1#   |
|                     | Calling to turn on power for some seconds     |  |
|                     | Calling control power - OFF                   | #09#0#   |
|                     | SMS when calling control - ON                 | #41#1#   |
|                     | SMS when calling control - OFF (default)      | #41#0#   |
| Power Control       | Any phone number control - ON                 | #31#1#   |
|                     | Any phone number control - OFF                | #31#0#   |
|                     | 230V Power - ON                               | #01#0#   |
|                     | 230V Power - OFF                              | #02#0#   |
|                     | 12V Power - ON                                | #42#01#  |
|                     | 12V Power - OFF                               | #42#00#  |
|                     |   |  |
| Delay control       | Turn ON power after some minutes              | #12#0#Minutes#1#                                       |
|                     | Turn OFF power after some minutes             | #12#0#Minutes#0#                                       |
| Schedule<br>control | Set schedule control parameters               | #20#0#ID#WorkDay#StartTime#EndTime                     |
| CONTROL             | Schedule control - OFF                        | #19#0#0#   |
|                     | Set temp control parameters                   | #24#0#mode#low-temp#high-tempa<br>Warming=1; Cooling=2 |
| Temp control        | Temp control - ON                             | #23#0#1#   |
|                     | Temp control - OFF (default)                  | #23#0#0#   |
|                     | Temp alarm - ON                               | #21#0#1#   |
|                     | Set temp range                                | #22#0#MinTemp#MaxTemp#                                 |
| Temperature alarm   | Temp alarm – OFF (default)                    | #21#0#0#   |
| alaiiii             | Monthly report power consumption              | #54#3#   |
|                     | Report power consumption - OFF                | #54#0#   |
|                     | SMS when sensor alarm - ON (default)          | #40#1#   |
|                     | SMS when sensor alarm - OFF                   | #40#0#   |
| Sensor alarm        | Change sensor name                            | #43#sensor1#Sensor2#                                   |
|                     | Change alarm mode                             | #44#sensor-number#mode#                                |
|                     | Check wired sensor status                     | #44#   |
|                     | Sensor trigger, auto turn on 230V power       | #42#220#time#  |
| Sensor trigger,     | Sensor trigger, auto turn on 12V DC power     | #42#12#time#   |
| turn on power       | Disable sensor control                        | #42#0#   |
|                     | SMS when on/off button pressed – ON (Default) | #03#1#   |
|                     | SMS when on/off button pressed function - OFF | #03#0#   |
| SMS                 | SMS when power lost or restore – ON (Default) | #05#1#   |
| notifications       | SMS when power lost or restore function - OFF | #05#0#   |
|                     | SMS to Users – ON (Default)                   | #16#1#   |
|                     | SMS to Users - OFF                            | #16#0#   |
|                     | Check status                                  | #07#   |
| Check               | Check GSM signal                              | #27#   |
| status              | GSM signal alert - ON                         | #27#1#   |
|                     | GSM signal alert – OFF (Default)              | #27#0#   |
| Danat analyst       | , ,   | #08#1234#  |
| Reset socket        | Reset to factory setting                      | #UU# 1234#   |

# Technical specification

| Max power loading:        | 16A 3500W (Two lines control)         |
|---------------------------|---------------------------------------|
| Power intput:             | AC 110~250V                           |
| Power output:             | AC 110~250C, DC12V (max 200mA)        |
| Frequency bands:          | GSM: 900/ 1800Mhz                     |
| Temperature sensor type:  | DS18B20                               |
| Temperature sensor range: | -30 to 100 degree                     |
| SIM card slot:            | Big size SIM card 15×25mm             |
| Wired sensor input:       | NO (normal closed) or NC(normal open) |