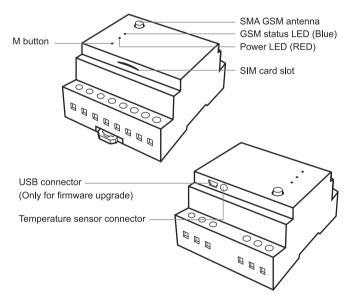




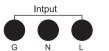
Product Instruction:

SimPal-D210 DIN-Rail GSM Power Control: working with GSM SIM card, calling to turn on/off power. Built-in power adaptor, 110-230V power input, both 12V and 110-230V power output. Support two lines wired sensor and one temperature sensor.

Product Structure:



Power Control connector:







Input: (110-230V AC)

L: Live line input

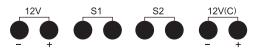
N: Negative line input

G: Ground line intput

Output: (110-230V AC) L: Live line output

N: Negative line output

G: Ground line output



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. Connnecting the GSM antenna onto connector.
- 2. Install SIM card, put the SIM card metal contact downside 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 110-230V AC power input and output, make sure power supply is cut off when wiring the cable.
- 5. Connect the 110-230V AC power, then device start to working. The LED will light on within 3-5 seconds after power connected.

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#.

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 need to manual reset the device to delete old Master settings. Keep press M button for 10 seconds, it will reset the device factory setting

Free calling control

Master or User number calling the 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 switch power output: #09#1#

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

Turn off calling control function: #09#0#

Power on/off

User can send SMS to constant turn on/off 230V power:

Turn on 230V power: #01#0# Turn off 230V power: #02#0#

Delay control

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

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

- Day: one digit, the values lie in the range of "0" to "8".
- The following table contains the descriptions of each value:

Value	Corresponding day	Value	Corresponding day
0	Everyday	5	Friday
1	Monday	6	Saturday
2	Tuesday	7	Sunday
3	Wednesday	8	Monday to Friday
4	Thursday	9	Weekend

• 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#0#2000#0800#, it means "everyday", it will turn on power from 20:00 and turn off at 08:00 next day.

Activate schedule control function: #19#0#1#

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

Temperature control

This functions need to buy DS18B20 temperature sensor separately, 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) and turn on power when temperature lower than 15 degree, turn off when temperature higher than 25 degree.

Activate temp control: #23#0#1#

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

Temperature alarm

This functions need to buy DS18B20 temperature sensor separately. Master set temperature range for device, when temperature out of range, it will send SMS to notify user of temperature change. Master send SMS to:

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

Temperature range is -30 to 100 degree.

Activate temperature alarm: #21#0#1#

Deactivate temperature alrm: #21#0#0#

• Wired sensor alarm

D210 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.

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

SMS when sensor alarm - ON: #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 NC mode, only alarm when two terminal open. 2 means NO mode, only alarm when two terminal closed; 3 means NO/NC mode, it will alarm when two terminal closed or open.

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 0-1800, it means turn on power for 0-1800 seconds. Set time 0, it turn off this function. Default value is 0.

Sensor trigger, auto turn on 12V DC power: #42#12#time#

Time range is 0-1800, it means when sensor trigger, auto turn on 12V DC power output for 0-1800 seconds, Set time 0, it will turn off this function. Default value is 60.

When sensor trigger, it can be both turn on 230V and 12V DC power according settings.

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#

SMS when calling operation

Default send SMS when calling on/off power, it can set to stop SMS reply when calling operation. Master send SMS to set: SMS when calling operation- ON: #41#1#

SMS when calling operation- OFF (Default): #41#0#

Noted: Calling SMS reply only work when set calling switch power, if user set calling to turn on power for some seconds, it will fixed do not reply SMS.

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#
	Add Family-number	#06#Family-Number#
Define the users	Check Family-number	#06#
	Delete Family-number	#15#Family-Number#
	Delete all Family-number	#15#
	Set calling to switch power	#09#1#
	Set calling to turn on power	#09#2#time#
	for some seconds	
Power Control	Turn off calling function	#09#0#
	Power - ON	#01#0#
	Power - OFF	#02#0#
		#12#0#Minutes#1#
Delay control	Turn off power for some minutes	#12#0#Minutes#1# #12#0#Minutes#0#
	Turn on power for some minutes	
0	Schedule control - ON	#19#0#1#
Schedule control	Set schedule control parameters	#20#0#WorkDay#
	·	StartTime#EndTime#
	Temp control - ON	#23#0#1#
Temp control	Set temp control parameters	#24#0#mode#low-temp#high-temp
	<u> </u>	Warming=1; Cooling=2
	Temp alarm - ON	#21#0#1#
Temperature alarm	Set temp range	#22#0#MinTemp#MaxTemp#
	Temp alarm – OFF(Default)	#21#0#0#
	Wired sensor alarm - ON	#40#1#
Sensor alarm	Wired sensor alarm - OFF(Default)	#40#0#
Sensor alarm	Change sensor name	#43#sensor1#Sensor2#
	Change alarm mode	#44#sensor-number#mode#
	Sensor trigger, auto turn on	#42#220#time#
Sensor trigger,	230V power	
turn on power	Sensor trigger, auto turn on	#42#12#time#
	12V DC power	
	SMS when on/off button	#03#1#
	pressed – ON (Default)	
	SMS when on/off button	#03#0#
	pressed function - OFF	110011011
	SMS when power lost	#05#1#
	or restore – ON (Default)	#00#1#
SMS notifications	SMS when power lost or	#05#0#
	restore function - OFF	#05#0#
		#41#1#
	SMS when calling - ON	
	SMS when calling – OFF (Default)	#41#0#
	SMS to Users – ON (Default)	#16#1#
	SMS to Users - OFF	#16#0#
	Check status	#07#
	Check "Delay Control" status	#34#
	Check "Schedule control" status	#33#
01111	Check "Temp control" status	#32#
Check status	Check "temp alarm" status	#35#
		110711
	Check GSM signal	#27#
	Check GSM signal GSM signal alert - ON	#27#1#