

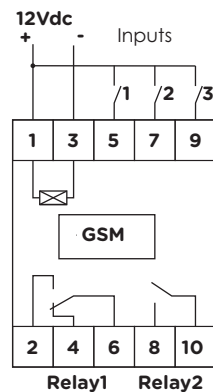
GSM Controller



Description

The Unit is designed with the latest microcontroller and gsm engine to produce a low cost GSM controller for monitoring and controlling three remote inputs and two outputs. The unit can be queried and controlled with a number of command as specified in the SMS commands section.

Wiring Diagram



FEATURES

- Large memory microprocessor
- Powerful GSM engine
- 12/24V for Battery operation
- Reconfigurable Input text
- 3 Inputs
- 2 *8A output relay
- Telemetry function
- 1 Administrator number
- 3 User numbers
- 2 Telemetry numbers
- Modular 53.5mm Din rail Mountable

Input Specifications

Inputs Pins 5, 7 & 9

Output Specifications

Relay Output 1* 8A SPDT

1* 8A SPST

Rated Isolation 6000 VAC

Voltage (contact / electric)

1000 VAC

(contact / contact)

Nominal Rate in Ac1 2500 VA

Rated Current 10A

Rated Voltage 250V

Mechanical Life 10×10^6 cycles

Supply Specifications

Power Supply AC Type 12 or 24 $\pm 10\%$

Isolation None

Consumption $\pm 1A$ at transmission

General Specifications

Power ON Delay 20sec

Power OFF Delay $\leq 500ms$

Pulse length 0.5sec
(from Pulse command)

Indication
POWER Supply On LED Green

Output On 2 LED's Red

Environment IP 20

Operating Temperature -10 to + 50°C

Storage Temperature -50 to + 85°C

Weight 250g

GSM Controller

SMS Commands

Commands preceded with a “#” can only be sent by the administrator
xxxx is user input (max 18 letters including spaces)
nnnn is user numbers in the format of 27821234567

All On	Energizes all outputs(2&6,8&10)
All Off	De-Energises all outputs
Out1 On	Energizes output 1 (2&6)
Out1 Off	De-Energises output 1(2&6)
Out2 On	Energizes output 2 (2&10)
Out2 Off	De-Energises output 2 (2&6)
Pulse1	Pulse Output 1 for 0.5sec
Pulse2	Pulse Output 2 for 0.5sec
Outputs	Queries Outputs (replies with status of outputs)
Inputs	Queries Inputs (replies with status of inputs)
#INPUT1 On xxxxx	Change input 1 ON text
#INPUT1 Off xxxxx	Change input 1 OFF text
#INPUT2 On xxxxx	Change input 2 ON text
#INPUT2 Off xxxxx	Change input 2 OFF text
#INPUT3 On xxxxx	Change input 3 ON text
#INPUT3 Off xxxxx	Change input 3 OFF text
#CHANGE ADMIN nnnn	Saves number of Administrator
#ADD USER1 nnnn	Save number of User 1
#ADD USER2 nnnn	Save number of User 2
#ADD USER3 nnnn	Save number of User 3
#ADD USER4 nnnn	Save number of Telemetry for Input 1
#ADD USER5 nnnn	Save number of Telemetry for Input 2
#REMOVE USER1 nnnn	Delete number of User 1
#REMOVE USER2 nnnn	Delete number of User 2
#REMOVE USER3 nnnn	Delete number of User 3
#REMOVE USER4 nnnn	Deletes number Telemetry for Input 1
#REMOVE USER5 nnnn	Deletes number Telemetry for Input 2

Mode of Operations

When the unit is power up a 20 seconds initialization starts. Power LED will light once network has been found. At this time the DGSM registers on the network and does a signal check.

If the signal strength is deemed too low the unit will enter a loop until the strength is sufficient to send SMS.

The unit will then send a “Power ON” SMS to all saved numbers.

Commands preceded with a “#” can only be sent by the administrator.

If a unrecognizable or unauthorised message is received the unit will reply with one of the following messages:

“Unauthorised Admin by:”

“Invalid Com”

“Invalid Num”

“No such user”

Confirmation of commands will be sent as follows:

“User Added “

“User Removed ”

When the user first receives the unit he has to send “#CHANGE ADMIN nnnn” where nnnn is the number of the administrator of the DGSM. No messages will be receive by phones not initialized to the DGSM.

To activate the telemetry function “#ADD USER4 nnnn” must be sent to the monitoring DGSM, where nnnn is the number of the DGSM reacting to the inputs of the monitoring DGSM.

If a liquid level is connected to Input1 of one DGSM (071 234 5678) and a pump to Output1 of another DGSM (082 765 4321, the message “#ADD USER4 27827654321” to 0712345678.

Numbers saved to each units will receive acknowledgment SMS.