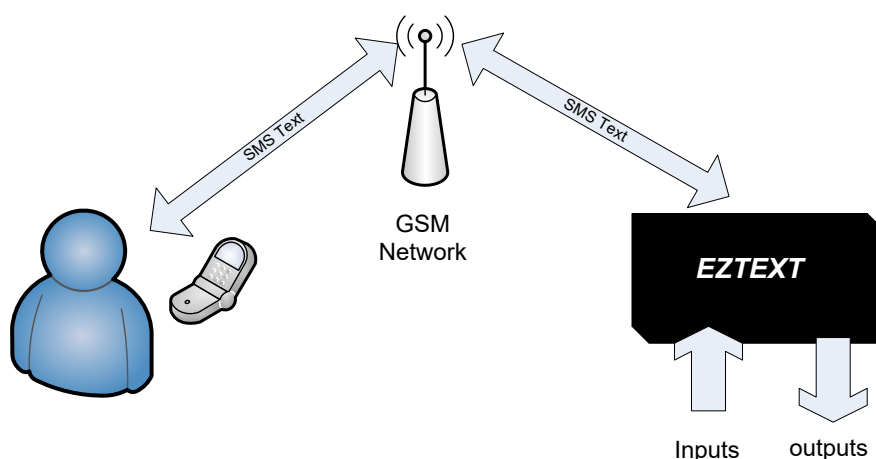# GSM Remote Control System

Features

- Two way remote control from a phone

- Easy to install and configure using SMS text message

- No PC required.

- 2 digital inputs (volt free)

- 2 x Relay switches rated 240Vac 5A

- Optional external temperature measurements

- User can set inputs and outputs names

- Waterproof enclosure rated IP68

- Worldwide 2G GSM.

Applications

- Remote Maintenance, warnings / Alarms.
- Irrigation Systems.
- Remote system monitoring.
- Plant Maintenance.
- Security Systems
- Alert / Panic caller

SMS Text

SMS Text

GSM
Network

EZTEXT

Inputs   outputs

Description

EZTEXT is a self contained two way Remote Control System which provides two changeover contact switches and two 'no volt' switch detect inputs. EZTEXT will send text messages to up to five users if its input is activated or at a temperature set point. A user can control EZTEXT switches by sending text messages. Custom messages may be set easily via configuration text messages.

FM76316

EZTEXT

Ordering Information

PART No	Description
EZTEXT	GSM telemetry system IP68 enclosure
BAT-EZTEXT	Optional lithium battery 880mAH
PSU-12V1A-IP	Power supply IP67
CBA-UFLSMA	Cable assembly for external antenna
CBA-EZTEMP	Temperature sensor cable

1. Insert SIM card

Insert
Simcard
Here

Please note:

- Insert SIM Card before applying power (standard 3 Volt SIM only).

- **The message memory of the SIM card should be clear before it is fitted.**

- **Ensure that the SIM card has not been PIN code protected!**

- Beware of Pay-as-you-go SIM which require regular top-up to remain active.

- It is recommended to bar Incoming voice calls to the SIM card to avoid error messages being sent back to the user. This can be achieved by calling the service provider.

The SIM card should be inserted into EZTEXT before applying power

- RF Solutions recommends O2 and Vodaphone SIM card and has carried out extensive testing using the SIM cards we have for these two networks.
- Problems have been identified with Orange SIM cards with this product.
- No guarantee can be given for the operation of this product with any network except those that have been tested by RF Solutions.

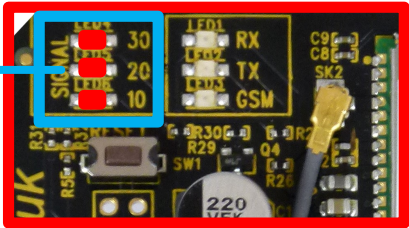## 2. Connect inputs/outputs and power connections

The EZTEXT unit can be powered from 9 to 24Vdc
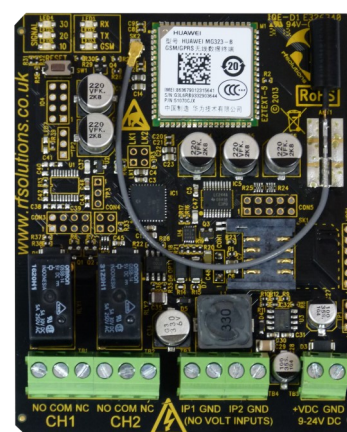
1	2	1	2	Supply
Outputs		Inputs		Terminals

EZTEXT

3. LED Indication at Start up

Logging onto Network (traffic light sequence)

30	🔴	⬜	⬜	🔴	⬜	⬜
20	⬜	🔴	⬜	⬜	🔴	⬜
10	⬜	⬜	🔴	⬜	⬜	🔴

Error! (All Flash ON / OFF together)

30	🔴	⬜	🔴	⬜	🔴	⬜
20	🔴	⬜	🔴	⬜	🔴	⬜
10	🔴	⬜	🔴	⬜	🔴	⬜
RX	🔴	⬜	🔴	⬜	🔴	⬜
TX	🟢	⬜	🟢	⬜	🟢	⬜

Error - No GSM Service
1. Check SimCard
2. Check Antenna Connection

4. LED Indication after start up (normal operation)

Signal Strength

Good	OK	Poor
🔴🔴🔴	🔴🔴	🔴
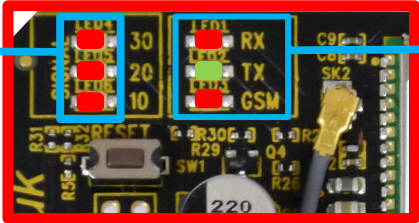
Activity LED's

RX	Receiving an SMS
TX	Transmitting an SMS
GSM	Intermittent flash GSM healthy

5. Operational battery backup (880mAH lithium rechargeable)

The battery provides an automatic backup supply to continue normal operation when power fails. EZTEXT can also send an SMS when power is switched to battery and when main power is restored.
The battery is recharged and maintained when power is present
In the event of a complete power loss, EZTEXT will retain user configured data, however the status of the relays will be lost.
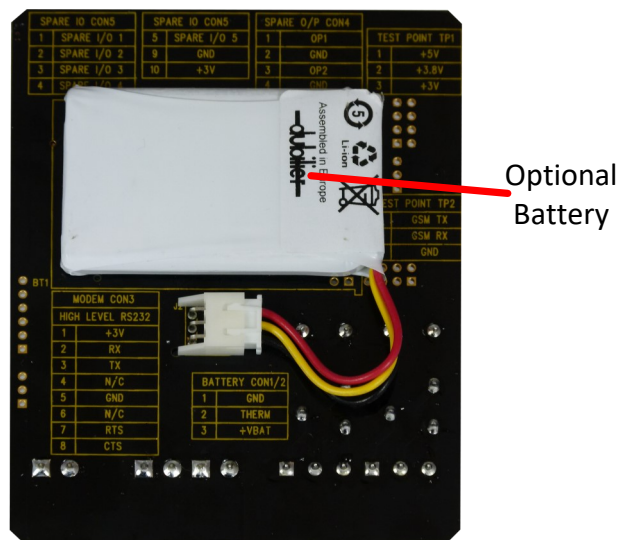
Optional
Battery

6. Optional external antenna

Using an external antenna can provide a much better signal reception than the internal antenna
unplug the antenna connection. Use cable adaptor CBA-UFLSMA-1 to provide an SMA bulkhead connector into which many alternative GSM antennas may connect. Using an external antenna can provide a much better signal reception than the internal antenna

Antenna
Connection

Integral
Antenna

CBA-UFLSMA-1
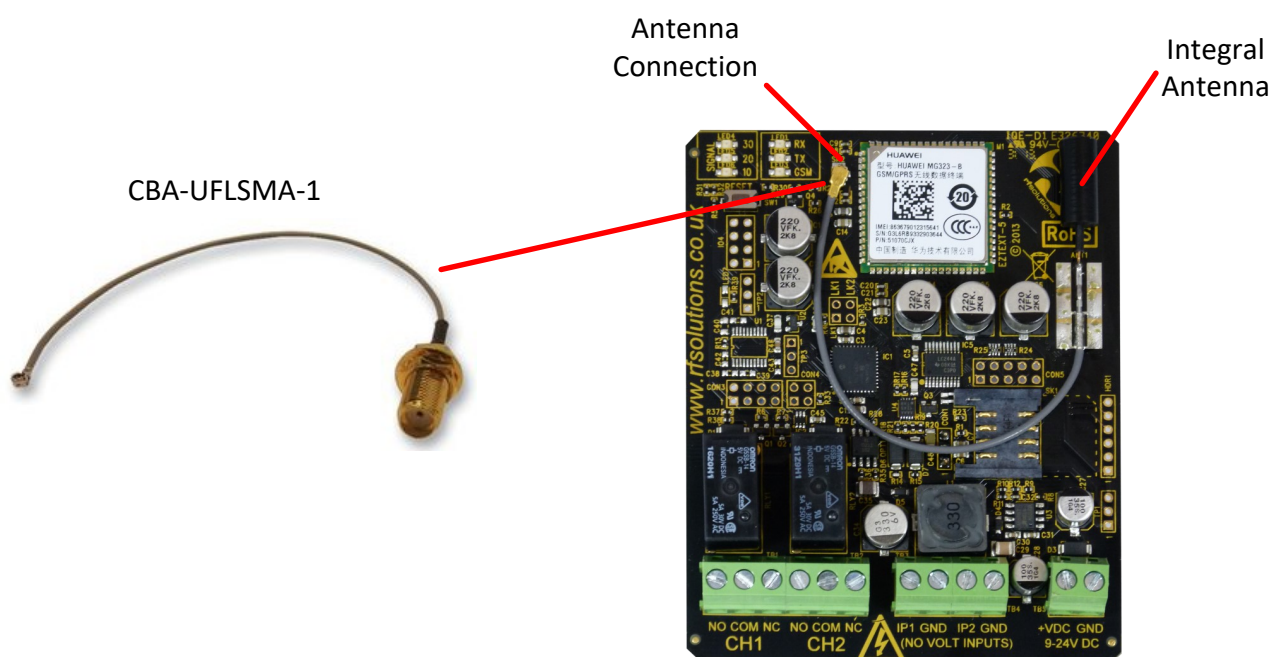
7. Optional temperature measurement

Using the cable adaptor CBA-EZTEMP provides a 1metre plug in cable with temperature probe.
This enables the EZTEXT temperature monitor and control functions.

Connect Cable
CBA-EZTEMP
Here

8. User set-up commands

Title	Command	Description	Example
Password	UPW	**UPW#UNITPW** User must send UPW command within 5 mins after power applied. Setting the UPW is carried out by sending this text message to the unit. The User Password (4 – 8 Characters) is not case sensitive and can consist of any letters or numbers. If for any reason the unit password is lost, remove all power for 1 minute, and then start again.	UPW#1234 (sets password to 1234) Response: UPW OK
Unit identity	UID	**UNITPW#UID#UNITID** This sets the 'identity' of the EZTEXT unit, and will be included in any response text from EZTEXT. The UNITID can be 4 to 10 characters.	1234#UID#Door_Alarm (do not use spaces) Response: Door_Alarm UID OK
Response	RESPONSE RESPONSE?	**UNITPW#RESPONSE#x** Setup a Reply Text EZTEXT after receiving a command x=ON or OFF **UNITPW#RESPONSE?** Requests the status of the current RESPONSE setting NOTE: messages which specifically demand a response such as requests for input status will always be responded to as will the UPW, UID etc. Default setting is for response to be turned off.	1234#RESPONSE#ON Turns on Response messages 1234#RESPONSE? Replies with the EZTEXT setting to responses

9. INPUT Commands

Title	Command	Description	Example
Set an input name	**IPNAME** **IPNAME?**	When the input changes this is the name that the EZTEXT will transmit in its text message **UNITPW#IPNAMEn#<name>** This designates a <name> to an EZTEXT input (max16 characters) n=1 - 4 for inputs1 to 4 **UNITPW#IPNAME?** Requests the name given to all inputs	1234#IPNAME1,Gate Sets input 1 to be known as 'Gate' 1234#IPNAME? Requests the current name of input1
Input number to text	**IPNUM** **IPNUM?n** **IPNUMDEL**	Sets the destination phone number(s) (max 5 per input) when an EZTEXT input is activated. **UNITPW#IPNUMn,<num to text>** n=1 - 4 for inputs1 to 4 **UNITPW#IPNUM?n** Requests all Stored cell Nos for that input **UNITPW#IPNUMDELn** n=1 - 4 for inputs1 to 4 Deletes all stored cell Nos for that input number	1234#IPNUM1,00441234567891 Sets tel No to input 1 1234#IPNUM?1 Requests all stored telephone numbers for input 1 1234#IPNUMDEL2 Deletes **ALL** stored numbers for input 2
Set number of input activations before SMS sent	**IPCNT** **IPCNTVAL?**	Sets the number of times an input must be activated before an SMS is sent **<UNITPW#IPCNTn,x** n= input number (1 or 2) x= Counter (0 to 65500) **UNITPW#IPCNTVAL?** Requests the actual current value of the counter	1234#IPCNT1,10 A text will be sent after input 1 has been activated 10 times 1234#IPCNTVAL? Responds with ; INTPUT1= 10/4 intput1 has been activated 4 times, 6 more activations required before text is sent
Delay SMS on input activation	**IPDLY** **IPDLY?**	Sets a timer (Max 65500 secs). When the EZTEXT input is activated the timer starts to countdown in seconds. When the counter reaches zero, providing the input is still activated a text message will be sent. **UNITPW#IPDLYn,xx** n=1 - 4 for inputs1 to 4 'xx' can be a number from 0 to 65500 **UNITPW#IPDLY?** Requests timer values for all inputs	1234#IPDLY1,60 Input 1 has a 60sec delay before text is sent 1234#IPDLY? Responds with ; INTPUT1= 60/34 (output1 has been active fro 34 out of a total 60sec preset time. 34secs more is required before text sent)

10. Output Commands

Title	Command	Description	Example
Activate an output	OUT	**Turns an output ON or OFF** **UNITPW#OUTn,x** n=Relay number = 1 to 4 x=Relay Status = ON, OFF	1234#OUT1,ON Turns Output1 ON
Set an output name	OPNAME OPNAME?	This designates a name to an EZTEXT output **UNITPW#OPNAMEn,name** n=Output no name= name can be up to 15 characters. **UNITPW#OPNAME?** Requests the name of the Outputs	1234#OPNAME1,AIRCON sets output 1 name to be 'AIRCON' 1234#OPNAME? Requests names of all the outputs
Set output on time	OPDLY OPDLY?	Sets output operation time. The output can be set from 1 to 65500 seconds, or If is set to '0', then the output will latch on **UNITPW#OPDLYn,t** n=Output number t=Delay time (seconds) **UNITPW#OPDLY?** **Requests the current 'on' time setting for an output EZTEXT replies with the preset time delay output and the actual time that the output has been activated for**	1234#OPDLY1,500 Sets output1 to operate for 500 sec's 1234#OPDLY? Responds with ; OUTPUT1= 500/34 (output1 has been active for 34 out of a total 500sec preset time)

11. Power Fail Commands

Title	Command	Description	Example
Number to text on power failure	PFNUM PFNUM? PFNUMDEL	This command sets a number to text (max 5 nos) when Power Failed (only if optional battery fitted) **UNITPW#PFNUM#<numbertotext>** Sets the number to text on power fail **UNITPW#PFNUM?** Requests the current numbers that are stored UNITPW#PFNUMDEL PFNUMDEL Deletes all stored Power Failed cell Nos	1234#PFNUM#00441273898000 1234 #PFNUM? Response: Returns current settings 1234 #PFNUMDEL Deletes all stored cell Nos against this
Text on power restored		**UNIT ID#Reboot power had failed** Texts will be sent to cell phone numbers stored in IPNUM on reboot after a power failure or reset (when power is reapplied). Note: this feature is enabled or disabled by simply having cell phone numbers in PNUM.	Building2 Reboot power had failed

12. Temperature Commands

Command	Description	Description	Example
Request current temperature	**TEMP?**	UNITPW#TEMP? requests the current temperature.	1234# TEMP?
Set SMS numbers to text on trigger	**TEMPNUM** **TEMPNUM?** **TEMPNUM-DEL**	UNITPW#TEMPNUM#\<numbertotext> Sets the cell phone nos (max of 5) linked with the temperature monitoring. TEMPNUM? Requests all linked cell phone nos TEMPNUMDEL Deletes all linked cell phone nos	1234#TEMPNUM#00441234567891 Sets the number 01234 567891 1234#TEMPNUM? Requests all cell phone numbers which will be notified on temp triggers 1234#TEMPNUMDEL Deletes all the telephone numbers associated with Temperature monitoring
Set maximum trigger temperature	**SETTEMPMAX**	UNITPW#SETTEMPMAX#n Sets the maximum temperature trigger level in degrees Celsius.	1234#SETTEMPMAX#30 Sets the upper trigger level to 30^oC
Set maximum trigger temperature	**SETTEMPMIN**	UNITPW#SETTEMPMIN#n Sets the minimum temperature trigger level.	1234#SETTEMPMIN#20 Sets the lower trigger level to 20^oC

13. System Commands

Title	Command	Description	Example

Report GSM signal strength	**SIGQ**	**UNITPW#SIGQ**
		Reports EZTEXT GSM signal strength as;
		    'POOR' (consider alternative antenna)
		    'OK', or 'Good'.
			1234#SIGQ
			
			Response : Signal is good

Retrieve status of inputs and outputs	**STATUS**	**UNITPW#STATUS** requests the current status of all inputs and outputs	1234#STATUS Response: Returns current settings

## 14. Error messages & factory reset

There are three error messages;

NO AUTHORISATION   Means that EZTEXT did not accept the password

UNRECOGNIZED COMMAND   Password correct but the command is incorrect

UNRECOGNIZED VARIABLE   Password and command OK but the variable data is incorrect

Factory reset
Hold down the RESET button for approx10 seconds until all LEDs flash, then release. This will reset EZTEXT to factory default settings and restart.

Reset switch
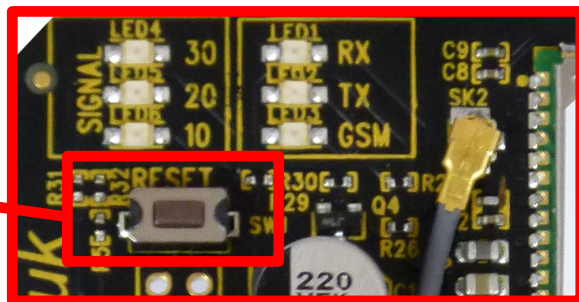
Technical specifications

Storage Temperature: -10 to +70°C.
Operating Temperature: 0 to +55°C.
EZTEXT Enclosure Rating: IP68
EZTEXT Dimensions: 130 x 112 x 42mm

Electrical Characteristics*	Min	Typical	Max	Dimension	Notes
Supply Voltage	9		26	V	
Supply Current for EZTEXT: Idle Operating	35 200	44 370	100 1000	mA mA	1 2
Temperature Cable	-40		99	°C	3
Mains rated Relay Rating (230Vac)		5	12	A	4

*Notes
Figures refer to maximum supply current required with all components idle.
Figures refer to peak supply current required with all components operating.
In practice internal reservoir capacitance limits the instantaneous peak current to less than 500 mA.
Temperature accuracy +/-1degree Centigrade
The relay contacts in this unit are for functional switching only and must not be used for isolation purposes.

EZTEXT

RF Solutions Ltd. Recycling Notice
Meets the following EC Directives:

DO NOT
Discard with normal waste, please recycle.

ROHS Directive 2002/95/EC
Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC
Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfills its WEEE obligations by membership of an approved compliance scheme.

Waste Batteries and Accumulators Directive 2006/66/EC
Where batteries are fitted, before recycling the product, the batteries must be
removed and disposed of at a licensed collection point.

Environment Agency producer registration number: WEE/JB0104WV.