

# Datasheet

## GSM Commander



Get the benefit of **total control** & **peace of mind** for your remote sites or equipment. Our SmartSetup computer software with point-and-click features enables you to create your own application.

The **GSM Commander** can monitor and control your equipment and provide you with realtime 2-way communication via SMS, GPRS and voicecall.

### Why GSM Commander?

- **Point-and-click** features for easy setup
- **Expandable** hardware plug-ins
- GSM controller with **built-in** Logic controller
- Advanced **power and battery** management
- **Local** developed, manufactured & supported

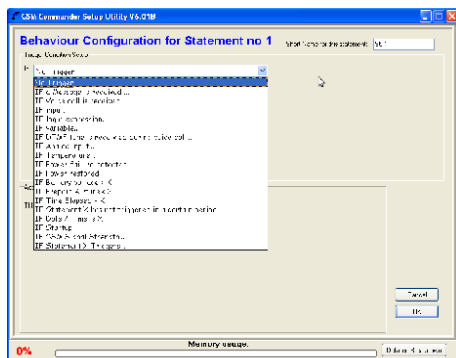
### Product Highlights

- Up to 32 opto isolated digital **inputs**
- Up to 32 relay **outputs** (8amp)
- 1 **analogue** input (up to 11 coming)
- 10 – 24vDC power input with
- 1 backup battery input
- 2 **temperature** inputs (up to 12 coming)
- **Serial** interface port
- **Audio** interface port
- Dual SIM for **redundancy** (Professional version)
- External antenna jack
- **SMS, Voicecall** and **GPRS** capability

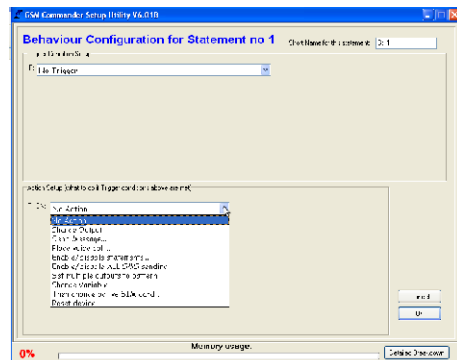


## Top reason why customers buy this product:

(click on these graphics to view a 4 min video)



**SmartSetup (trigger features)**



**SmartSetup (action features)**

## GSM Commander Base Units

Base units feature an internal Cellular Engine that allows it to connect to a cellular network to send and receive SMS messages, place and receive Voice Calls, enable realtime communication via GPRS. A SIM card is fitted by the user. The device is easily configured using the SmartSetup software on a computer. This allows the user to create his own setup for his own application. This easy to use, point-and-click software is fantastic.

### Feature Matrix

Model	Type	GSM Telemetry	GPRS Enabled	Onboard Inputs	Onboard Outputs	Expandable Inputs/Outputs	Number of Statements	Setup Memory	Temp Probes -17 to 35°C or 0 to 100°C	0-10v Analog Inputs	Power / Battery Management	Configuration via USB	Serial / Audio Port	DTMF Decoder	SIMCard Slots
GB0101S	SMS	YES	NO	1	1	none	8	N/A	0	0	YES	NO	NO	NO	1
GC0321	Basic	YES	NO	2	2	12/12	32	2kb	2	1	YES	YES	YES	NO	1
GC0641	Adv	YES	YES	2	2	22/22	64	4kb	2	1	YES	YES	YES	YES	1
GC1281	Prof	YES	YES	2	2	32/32	128	8kb	2	1	YES	YES	YES	YES	2

### Matrix Feature Descriptions

<b>Type</b>	Indication of Base unit capabilities
<b>GSM Telemetry</b>	Can be used with GSM communication
<b>GPRS Enabled</b>	Can be used with realtime GPRS communication
<b>Onboard Inputs</b>	The number of input provided on the base unit itself
<b>Onboard Outputs</b>	The number of outputs provided on the base unit itself
<b>Expandable Inputs/Outputs</b>	The maximum number of Inputs/Outputs that can be added by fitting expansion units
<b>Number Of statements</b>	A measure of the amount of complexity that can be programmed into the unit. Each statement is of the form IF <ABC happens> THEN <do something>, such as IF Input 1 goes Active, THEN send "Generator Tripped to 0831231234"
<b>Setup Memory</b>	The amount of memory that is available for setup. - This is a measure of how much information the setup can contain. Each 1kb of memory can store upto 125 Telephone numbers, or 16 Messages
<b>Temp probes supported</b>	The number of Temp probes the Base unit can accept
<b>0-10v Analog inputs</b>	The number of Analog Inputs available
<b>Power / Battery Management</b>	The ability to detect power failures and monitor a connected battery.
<b>Configuration via USB</b>	if YES, the unit is configured via software from a PC. If NO, the unit is configured via SMS.
<b>Serial / Audio Port</b>	Port can be used to communicate via RS232 or can plug a 2 way audio interface to speak and listen through the GSM Commander.
<b>DTMF Decoder</b>	if YES, the unit is able to recognize (and respond to) key presses on a remote phone during a voice call.
<b>SIMcard Slots</b>	If 1, the unit has only a single SIMcard slot. If the SIMcard in that slot becomes faulty or the associated network goes down, the unit lose communication ability. If 2, the unit can switch over to a secondary SIMcard if it detects problems on the primary SIMcard, thus greatly enhancing reliability.

## So what are the differences between the models exactly?

### GB0101S (SMS Commander)

Is programmed via SMS only and can take up to 8 behavior statements. It does not support, Time constraints, I/O constraints, DTMF or GPRS features, and it's inputs and outputs are NOT expandable.

### GC0321 (Basic)

It can take up to 32 behavior statements (from there the "032" in the name). It provides a total of 2048 bytes of (dynamic) setup memory. It does not support I/O constraints, DTMF or GPRS features, and it is expandable up to a maximum of 12 inputs and 12 outputs.

### GC0641 (Advanced)

It can take up to 64 behavior statements. It provides a total of 4096 bytes of (dynamic) setup memory. It supports I/O constraints, DTMF and GPRS features, and it is expandable up to a maximum of 22 inputs and 22 outputs.

### GC1281 (Professional)

This unit provides (you guessed it) 128 statements, and a total of 8192 bytes of dynamic setup memory. It supports everything that you find in the Advanced, but it also has dual SIM-card functionality. Dual SIM provides network redundancy. You install two SIMcards. One is primary and one is secondary. If the one network dies, the commander can use the second network. It supports I/O constraints, DTMF and GPRS features, and it is expandable up to a 32 inputs and 32 outputs.

### What are the GPRS functionality that is referred to above?

GPRS functionality will (among other things) allow real-time logging of information to a web server. These features are available on the Advanced and Professional models.

## Base unit Technical Specifications

<b>Digital Inputs:</b>	Opto-isolated. Inputs draw 10-30mA, depending on the voltage. Can accept DC signals of any type, including: <ul style="list-style-type: none"> <li>- Dry Contacts</li> <li>- Open Collector (NPN)</li> <li>- Open Collector (PNP)</li> <li>- DC Voltage (6-18V)</li> </ul>
<b>Digital Outputs:</b>	SPDT Relays Rating: 8Amp DC (10-48v) ) <b>OR</b> 4Amp AC (110-400v) ( <i>non inductive loads</i> )
<b>Current Consumption:</b>	60mA at Idle (no inputs or outputs active)
<b>Power Supply:</b>	10-24V DC via DC Jack or Screw Terminal It is advised that the base unit be powered from its own dedicated supply in industrial applications.
<b>Operating Temperature:</b>	-10 to +60deg C
<b>Storage Temperature:</b>	-20 to +85deg C
<b>Dimensions:</b>	"GC" Series: 148 x 86 x 28mm "GB" Series: 127 x 73 x 28mm

**Note:** In industrial applications, it is advised that the GSM Commander be installed into its own metal housing and be powered from a separate power supply. (As opposed to sharing one with electrical equipment).

## Expansion Units

### (Compatible with "GC and PLC" Series only)

Expansion units are connected to GC series base units to expand the number of inputs and outputs that are available. Multiple expansion units can be connected to a base unit, to provide for up to 32 inputs and 32 outputs. (Different base unit models cater for different maximum numbers of expanded Input/outputs – See the base unit feature matrix)

### Current Expansion units include:

GX0505 : 5 x input and 5 x output Expansion

GX1000 : 10 x input Expansion

GXC1000 : 10 X Config IO Expansion Unit (0-20V / 0-20mA / D.IN / D.OUT) (Q4. 2011)

GXT1000 : 10 X Input Temp Expansion for PT100 Probes (-50 to +200C) (Q4. 2011)

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<b>Current Consumption:</b>	60mA at Idle (no inputs or outputs active)
<b>Power Supply:</b>	10-24V DC via DC Jack or Screw Terminal
<b>Operating Temperature:</b>	-10 to +60deg C
<b>Storage Temperature:</b>	-20 to +85deg C
<b>Dimensions:</b>	148 x 104 x 28mm

## Additional Products

**AirDrive** web interface is developed for **real time** site management using **GPRS** communication. **AirDrive Lite** offers remote upload of configurations. **AirDrive Full** offers real time site control, critical events management and advanced reporting.

**House Commander** is a truly affordable DIY home automation system. Create your own automation system that also offers 2-way cellphone control and monitoring. Based on the well-known GSM Commander product, House Commander is the perfect solution to "pimp up" your house! Control and monitor everything from [one single device!](#)

**BaseLogger** software is developed to manage from 1 to 127 GSM Commander field devices, using **SMS** communication. A very cost effective system for basic site control and critical events reporting.

**PLC Commander** is a GSM Commander without the GSM telemetry functionality.

The fact is, the SmartSetup Software is so easy to use, why struggle with conventional programming for your PLC setups. Best suitable for mini-PLC applications

## ***Accessories***

### **Temperature probes**

GT002 : Temperature Interface

Allows up to 2 x temperature probes to be connected to a "GC" series Base Unit.

GT001-1 : 0°C – 100°C temperature probe with 2 wire for "GC" units (requires GT002)

GT011-1 : -17°C – 35°C temperature probe with 2 wire for "GC" units (requires GT002)

### **Audio**

Available in 2012. 2-way audio interface module (plug in serial port on Base unit)

### **Antennas**

A range of antennas is available for outdoor applications or weak reception areas.

### **Power Supplies & Batteries**

Various switching PSU's and 12v, sealed lead-acid batteries are available

### **Cables**

SMA, Serial, USB to Serial Converter and Expansion ribbons are available.