

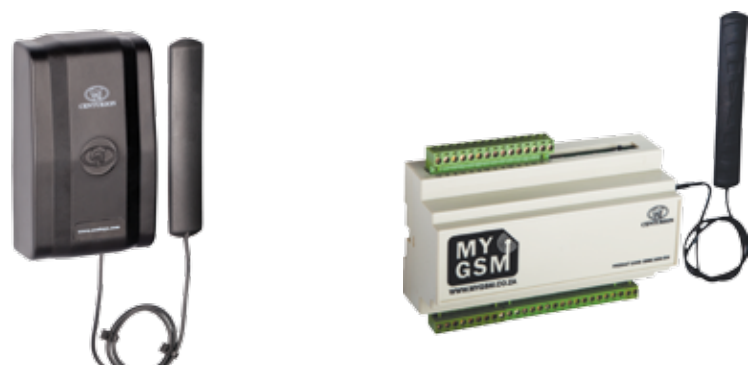


GSM DEVICES

GSM modules are the wave of the future when it comes to high-security – yet cost-effective – monitoring and control. GSM modules from Centurion Systems allow you to monitor and control up to eight separate electrical devices using your mobile phone or landline, giving you the freedom and peace of mind to take home security with you wherever you go.

GSM Device Quick Selection Guide

This quick selection guide will help you make an informed decision when selecting a GSM monitoring and control device.



	G-SWITCH-22	MyGSM 8180
Input voltage range	11V – 30V DC	12V – 24V DC
Number of inputs	2	8
Number of outputs	2	8
Microphone and speaker	-	Optional microphone and speaker
Expandable inputs	-	Expansion Port available
Expandable outputs	-	Expansion Port available
Web interface	√	√
Reacts to SMS and Missed Call	√	√
Reacts to 'Please Call Me'	-	√
Programming	Web, SMS	Web, SMS, USB
Maximum number of users	1200	5000
Full reporting	Web-based	Web-based
Limited uses counter	Based on number of uses	Time-based
Time-based access modes	√	√
Number of SIM card slots	1	2
Low Airtime Warning	On request	On request
Over-the-air firmware updating	√	Yes (upon request)
Inputs can be set to react to Rising/Falling/Both edges	√	√

Productivity & GLOBAL COMPETITION

by Ian Tingle, Production Director

Productivity and efficiency are central and key to the survival of any manufacturing concern.

The world is becoming ever increasingly competitive and the very survival of any company hinges on its ability to perform better than its competitors.

This requirement was identified at the outset and we have continuously strived to improve our manufacturing capability by addressing key issues affecting productivity.

Continuous improvement requires a radical change of attitude: the defence of the status quo and resistance to innovation and change is normal, and so a company-wide long term strategy is required to effect a change to the corporate DNA.

We have addressed this requirement through the use of tools and techniques from programs like the WPC. We have seen marked improvement in delivery over the last while and we will continue to focus in this area as well as in the areas of innovation and quality to further improve our general competitiveness.

We have had to adapt our manufacturing over the years to cater for ever increasing volumes and diversity of product. In the early days, mechanical assembly was executed with hand tools and a few very basic jigs and fixtures. The same applied to electronic assembly – components were all 'through hole', hand placed and soldered and then tested manually.

The current picture is very different. The design of product facilitated the use of production assembly tools, conveyors and jigs, and testing is a fully automated and detailed process.

We have also backward integrated certain types of manufacture – we have a full in-house CNC machine tool facility with plants ranging from band saws, lathes, machining centres and gear hobbles to thread rolling machines. Our electronic assembly plant consists of two high speed 'SMT' pick and place lines and a state of the art optical inspection machine.



G-SWITCH-22

2G GSM-Based Monitoring and Control Device

Product Code: **GSWITCH0V3**

The Centurion Systems' G-SWITCH-22 gives you complete control at your fingertips. With the ability to switch devices on and off and send you alerts – all via your phone – the G-SWITCH-22 lets you look after your home or business from just about anywhere with a 2G GSM network. The G-SWITCH-22 offers two outputs for activation, and two inputs for monitoring and can be effortlessly and securely administered using the free G-WEB online portal or via SMS.

Main Features

- Control two electrical devices, such as an automated gate and garage door operator, from anywhere in the world
- Monitor a system by receiving SMS alerts - for example when your mains power has failed or your alarm has been activated
- Caters for up to 1200 users, making it suitable for multi-user installations
- Activate devices with a Missed Call (free) or SMS
- Easy setup and administration via CENTURION's G-WEB online interface, or via SMS from your mobile phone
- Secure access with password protection for enhanced system security
- Inputs can be set to react to Rising Edges, Falling Edges or both - ideal for monitoring mains, alarm states, etc.
- Stores up to 3000 detailed transaction logs for greater peace of mind
- Adjustable Filter and Blanking Times - make event monitoring work for you
- Over-the-air bootloadable - update device firmware from the comfort of your home or office

Technical Specifications

Technical Data	G-SWITCH-22
Input voltage	11V - 30V DC only
Standby current	100mA
Maximum current	500mA
Operating temperature	-20°C - +85°C
Output relay rating	1A @ 30V DC (Outputs 1 and 2)
Housing material	ABS
Degree of protection	IP55
Memory capacity	1200 individual numbers
Memory retention	>200 years
Output pulse time range	1ms (default) to 50 days
Network required	2G GSM 900/1800MHz
SIM card required	Yes (activated)
Outputs	2 (potential-free)
Inputs	2 (reacts to Rising, Falling or both edges)

Examples of devices that can be monitored via G-SWITCH inputs:

- House alarm: Activated
- Electric fence: Alarm triggered
- Geyser status: On/Off
- Mains power: On/Off
- Fridge aboard your boat: On/Off
- Borehole pump status: Running/Off
- Water reservoir: Full/Empty
- Entrance gate status: Open/Pedestrian
- Vehicle monitoring: Ignition or alarm activated, or off or your reservoir is full or empty

Examples of devices that can be switched on, off or activated via G-SWITCH outputs:

- Automated entrance gates and garage doors
- Geysers
- Borehole pumps
- Alarm systems
- Lights
- Airconditioners
- Refrigerators
- Pool pumps



MyGSM 8180

2G GSM Monitoring & Control

Product Code: **MYGSM8800V1**

With eight inputs and eight outputs, the MyGSM 8180 is well-suited for industrial applications and multiple input monitoring and activations on a single site.

Main Features

- Control up to eight different devices from anywhere in the world using your mobile phone or landline
 - Monitor by receiving SMS alerts
 - Activate devices with a Missed Call (free), SMS or even a Please Call Me (free) ¹
 - Easy setup and administration using the G-WEB website, your computer's USB port or your phone
 - Caters for up to 5000 users
 - Dedicated signal strength test button – convenient and saves time
 - Rising and Falling Edge capabilities – perfect for monitoring power, alarms, etc.
- Inputs are optically isolated for greater versatility and protection
 - Removable antenna
 - Secure web portal for easy administration of MyGSM devices
 - Dual SIM card slots means that the unit is always online
 - Removable terminal strips for ease of maintenance
 - Convenient DIN-rail mount enclosure – ideal for industrial applications
 - Microphone output – can be used as a listening-in device

¹. Subject to availability on GSM service provider's network

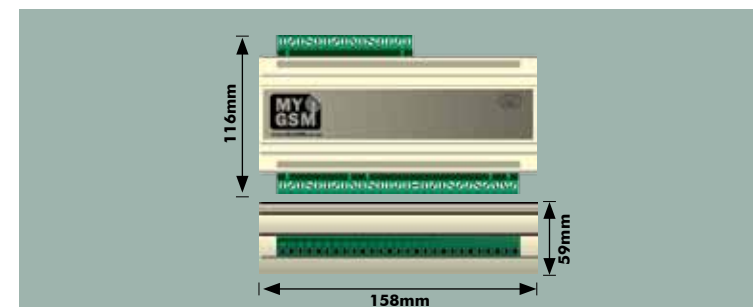
Technical Specifications

Technical Data	MyGSM 8180
Supply voltage	12V – 24V DC only
Standby current	50mA @ 12V DC
Maximum current	500mA
Operating temperature	-20°C - +85°C
Output relay rating	1A @ 30V DC (Outputs 1 to 8)
Housing material	ABS (DIN rail mounting)
Degree of protection	IP54

Functional Data	MyGSM 8180
Memory capacity	5000 individual numbers
Memory retention	>200 years
Output pulse time range	2 sec or latch
Network required	2G GSM 900/1800MHz
SIM card required	Yes (activated); Dual SIM card capacity
Outputs	8 (potential-free)
Inputs	8 (optically-isolated); 10 numbers per input can receive alerts

Examples of devices that can be monitored via MyGSM 8180 inputs

- Pump houses (many different pumps)
- Monitor and control multiple refrigeration units
- Use it in a generator room to monitor the power and fluid levels of multiple generators
- Perfect for electric fence systems where there are several energisers
- Create your own GSM alarm system for monitoring each room in your house by connecting a passive sensor to each of the inputs



GSM Temperature & Monitoring Kit

2G GSM Monitoring & Control

Various kit combinations available – refer to Price List

Absolutely perfect for monitoring the temperature inside refrigeration units as well as receiving text message notifications of mains failure, etc. – this comprehensive temperature-monitoring solution includes:

- MyGSM 2I2O GSM monitoring and control device with two inputs and two outputs
- UV-resistant, fade-resistant ABS plastic wall box
- Sturdy mounting bracket
- Temperature sensor with easy-to-read digital display
- CP84SM2A switch-mode charger
- Cable glands

Main Features

- Monitor temperature inside refrigeration units, etc, from anywhere in the world using your phone with a 2G GSM network
- Rising and Falling Edge capability – use single input to receive SMS notifications when temperature rises above/falls below preset temperature
- Ideal solution for remote mains monitoring
- Perfect for outdoor use thanks to tough IP65-rated ABS plastic enclosure
- Convenient, all-in-one monitoring solution
- Easy online administration via the G-WEB web portal

GSM Wall Kit

2G GSM Monitoring and Control

Product Code: MYGSMC2201V1

It's easy to obtain a powerful and comprehensive, all-in-one GSM monitoring and switching systems with the GSM Wall Kit. Virtually everything you need is already included in the kit; you need simply to add a battery (for which provision has also been made in the enclosure) and enjoy the benefits of a system that allows you to monitor and control up to two, or eight (depending on GSM module model) electrical devices from anywhere in the world with 2G GSM coverage - all housed within a neat, weatherproof enclosure.

Main Features

- Monitor and control up to two, or eight (depending on GSM module model) electrical devices from anywhere in the world with 2G GSM coverage using your phone
- All-in-one functionality - your entire site management infrastructure in one central, convenient location
- Perfect for outdoor use thanks to robust, IP65-rated wallbox
- Fully customisable with mounting brackets for relay cards and for fitting either the smaller two input, two output module or the larger eight input, eight output module
- Easy to install with slotted, diagonal mounting holes for excellent mounting flexibility
- Easy online administration via the G-WEB web portal



G-WEB

Online Interface for Setting Up and Administering GSM Devices

Use the power of the internet to administer your Centurion Systems' GSM device from anywhere. Whether you want to add or delete users, edit device settings, view transaction logs, load airtime or even bootload the GSM product with the latest firmware, G-WEB gives you the freedom to do so without having to leave your home or office. Compatible with G-SWITCH-22, MyGSM 2120, MyGSM 8180, and SupaHelix.

Main Features

- Easy user interfaces to set up and administer Centurion Systems' GSM devices
- Password-protected for excellent online security
- Conveniently control all your GSM devices from a single user profile page
- Easy upload of multiple users' phone numbers – ideal for large residential complexes
- Quick and easy to add, edit, or delete single or multiple user phone numbers
- View and export transaction logs to monitor usage
- Synchronises all settings and logs seamlessly

GSM Mobile Application

GSM Monitoring and Control Mobile Application

The CENTURION GSM mobi app is the complete evolution of GSM monitoring and control. It delivers a good-looking and intuitive mobile interface that users can employ to administer and control their CENTURION GSM devices.

Main Features

- Convenient touch interface – activate your MyGSM device's outputs by simply tapping an icon on your mobile phone's screen
- Assign multiple controllers using the convenient 'Add Controller' feature
- Edit input and output settings such as rising or falling edge triggers, input names, whether outputs should be pulsed or latching, etc., using your phone – complete mobile convenience
- 'Share' a module's functionality with another user, for example to allow them to open and close your gate at home
- Available as a free download for iOS and Android devices
- Geo-fencing feature – automatically launches the app when you are within a configurable distance of your MyGSM device, for example when you are 1km from your entrance gate



ONLINE INTERFACE FOR GSM-BASED SYSTEMS