

# G4

## Control, Management & Monitoring System



19" box

Standard box

Datacenters and server facilities, cellular sites and many more rely on continuous electrical power in order to function properly. The malfunctioning of vital equipment could mean chaos for a company.

For that purpose, Gamatronic is proud to present the new G4 Control, Management and Monitoring Unit. Gamatronic's G4 is the perfect solution that offers total flexibility and business continuity, and can even be the answer for a remote site in the Amazon forest!

The G4 unit integrates Power/UPS/Environment/Dry contacts/IT control, in a one unique device, with built-in immediate alert capabilities via SMS/Mail/SNMP trap.



**GAMATRONIC**  
*Our Power, Your Confidence*

**“The G4 is simply terrific! I have never seen so many complicated needs satisfied by such a small device.”**

**Avi Ron, CEO RoNetworks**

# G 4 s o l u t i o n s

## **Power/UPS**

Vital electrical systems require backup units for power supply.  
What would you do in case of an AC failure at a remote site?  
How would you be involved in the status of the batteries?  
And no less important - how fast will a technician be notified  
and be able to arrive before it's too late?

### **G4 solution:**

The G4 has its internal web interface which the user can browse anytime and anywhere using an internal/external IP. The G4's internal modem is programmed to immediately send an alert to prearranged recipients that UPS is in critical state, while servers receive UDP messages and start count-down before shutdown. Users can also check UPS's backup time in active load via the web, see helpful values such as: input/output voltage according to different phases of UPS, DC battery voltage, frequency, battery temperature and permanently be in touch with the site.

## **Environment**

Extreme environmental changes can also affect the working capabilities of electrical systems. You might get a reading that the active temperature in server room is 45C, but you failed to receive an alarm that the internal air-condition stopped work a while ago. Or the opposite - temperature sensors show air condition is working at 18C but in fact the servers are overheating because of an open indow or door.

### **G4 solution:**

The G4 can connect up to 5 temperature sensors, allowing user to read active output temperature from a number of sources. Each sensor can be configured separately by user so that G4 immediately sends out an alarm when it recognizes excessive temperatures, as well as instant notification to technicians on the road to indicate the specific critical sensor.

## Dry Contacts

Any small malfunction at a site can lead to excessive damages and waste. A door left open, even slightly, can cause quick rise in temperature, leading to excessive activation of air conditioner, which causes generator to work overtime until it finishes all the fuel reserve - all this could be prevented if user had been notified in time. The common denominator of all these scenarios is simple: "Head off problems before they occur".

### G4 solution:

The G4 unit has 8 input and 4 output dry contacts that can be configured by user as normally open/close. Devices supported by dry contacts may be connected to the G4, and also configured according to user's requirements. The G4 can be arranged to notify and alert up to 10 phone numbers, although it is fully autonomous to resolve almost any problem without human intervention.

A wide range of supporting sensors, such as door/smoke/flood/motion, can also be ordered with the G4 unit.

## IT control

Are you instantly informed of server/switch/routers that suddenly lose ping request? Can you be alerted in real-time if the CPU load, physical/virtual memory or hard disc space is over limit in one of your 40 servers? Today it is possible to remotely connect inside each server and shut down manually when the site works on UPS batteries. But after AC failure is resolved, why wait till morning and wake them manually while someone in the world needs these servers during the night?! How are you notified if the AC has recovered at all?

### G4 solution:

The G4 unit can control and monitor up to 32 IT targets. User can configure the IP, server name, Mac address (retrieve automatically), time to count down in AC failure/low battery and time for "wake up" after AC is recovered. User can define number of rounds ping checks, CPU load, physical/virtual memory and hard disk usage limits, as well as alarm status when one of these limits is exceeded.

## GSM control

User can control the G4 unit via simple SMS commands, and receive notification depending of the event group alarm. Here are some of the control commands: temperature, drying, dryout, shutdown, wake, it. Some of them are of course password protected.

"Dryout 2 pulse admin"	Sending this text to the SIM number of G4 will pulsed the machine that is connected to dry out number 2.
"Temp 3"	G4 will response the current temperature of sensor number 3 in Celsius.

## G4 Specifications

Feature	Description
Controlled Devices	UPS Systems: Gamatronic and other manufacturers UPS; Stand Alone device: Gate operation, environment control, operating devices via dry contact, IT devices
Network Protocols	TCP/IP, UDP/IP, WAP, FTP, HTTP, Modbus, SNMP v2, DNS, PPP, SMTP, TELNET, SMS
Password protection	Encrypted BASE-64
Client Shutdown Software	Shutdown-Agent
SNMP Trap Notification	Up to 10 targets
email Notification	Up to 10 targets
SNMP Filtering	IP address and community
HTTP Auto fresh	Definable 3 sec - 1 minute
Input dry contacts (8)	Normally open/close (user define)
Output dry contacts (4)	Normally open/close (user define)
Temperature sensor inputs (5)	-55 °C to 125 °C
Processor	ZiLOG EZ80ACCLAIM! 50Mhz
RAM	512Kb
ROM	1Mb
Ethernet Line Interface	10/100Base Auto detect
Connectivity	RJ45 - LAN / WAN , GSM-Quad Band/GPRS
RS232 Serial Connection	DB9
Serial port for forwarding data	RJ45
External Power Supply	12 Vdc 1.5W
Storage Temperature Range	-10 °C to 65 °C
Physical size	5*15*15 cm , 19" 1U

## GAMATRONIC ELECTRONIC INDUSTRIES LTD.

**Headquarters and Factory** 14 Hartom St. POB 45029, Jerusalem 91450, Israel  
Tel: +972-2-5888222 Fax: +972-2-5828875 e-mail: info@gamatronic.co.il www.gamatronic.com  
**Tel-Aviv Sales Office** 34 Habarzel St. Ramat Hachayal, Tel Aviv Tel: +972-3-6499940 Fax: +972-3-6449791  
**Gamatronic UK Ltd.** 15 Chester Road, Colmworth Business Park, Eaton Socon, Cambridgeshire, PE19 8YT, United Kingdom Tel: +44 (0)1480 479889/ 472665 Fax: +44(0)1480 407865 info@gamatronic.net