



GAMATRONIC

A SolarEdge Division



PSM
CE

**CONTROL &
MANAGEMENT
PRODUCT CATALOGUE**



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More than a power monitoring device



Gmac5 is one of Gamatronic’s communication products. It combines power system monitoring with valuable additional features, including targeted alarm notifications which can be filtered by type and severity.

Gmac5 includes a built-in, password-protected web interface, accessible locally or remotely through any web browser. Configuration is straightforward thanks to a simple and intuitive interface.

Gmac5 provides remote monitoring of all current Gamatronic UPSs and other Gamatronic power systems.

Features

- Up to 20 recipients for email notifications
- Eight configurable groups for organization of alarm notifications
- Shutdown of remote servers via shutdown agent software
- SNMP v2c/v3 communication – all UPS communication is normalized to RFC 1628 (standard UPS protocol)
- RS232 communication supports all Gamatronic UPS systems using SEC, PowerPlus, and Megatec protocols as well as 1UDC+ rectifier systems
- Comprehensive event configuration is available for targeting specific types and severity levels of alarms to specific users
- Full-featured log includes a complete system snapshot saved for every event

Feature	Description
External power supply	12 Vdc 0.5 W
User interface	Password-protected HTTP interface for monitoring and configuration
Ethernet interface	10/100Base detect
Telnet	Telnet protocol support for automated system configuration
MCU	STM32F207 Cortex M3 @120MHz
Security features	Two levels of security for user interface, full SNMPv3 security
Monitorable power devices	All Gamatronic UPS and DC power systems that utilize any of the following protocols: SEC, Megatec, PowerPlus and 1UDC+
RS232 serial connection	DB9 (to UPS or power system)
Modbus communication	TCP Modbus communication support
Client shutdown software	Shutdown-Agent*
Email notification	20 targets
SNMP	SNMPv2: Filtering by manager and community SNMPv3: Authentication and privacy features supported
SNMP trap notification	10 targets
System log	Stores all readings for last 1000 events
Operating Temperature Range	0 °C to +60 °C
Storage Temperature Range	-10 °C to +65 °C
Dimensions WxDxH (mm)	70 x 155 x 36

* Option for VM and Linux

Gamatronic’s power management products provide secure monitoring and control for remote UPS and DC power systems.



Communication device combining power system monitoring with valuable extras



G5 is a communication device that combines power system monitoring with:

- input voltage-free contacts, tracking external sensors and devices
- output voltage-free contacts opening and closing external circuits
- voltage and current measurements

Like GMAC5, G5 includes a built-in, password-protected web interface, accessible locally or remotely through any web browser. The end-user will be informed of alarm conditions through email and SMS, as well as by monitoring the web interface. The interface is simple and intuitive, making the configuration of G5 straightforward.

G5 provides remote monitoring of all current Gamatronic UPSs and Gamatronic power systems.



Front, with 19" extensions



Rear, with top cover open



Temperature Sensors



Humidity Sensor



Flood Detector



Smoke Detector



Transformer Card for High DC/AC Voltages



Comparison of the Features of GMAC5 and G5

I/O

- 13 input volt-free contacts: 5 of which can be configured for kWh pulse metering and 1 for flood detection
- 5 programmable output volt-free contacts, all of which are changover type
- 3 temperature sensors
- 1 humidity sensor
- 4 analog inputs can be used for generic sensors or voltage/current measurements
- Up to 5 kWh pulse metering
- RS232 port for power system monitoring
- RS485 port for serial Modbus communication

FEATURES

- Up to 20 recipients for email or SMS notifications
- 8 configurable groups for sophisticated configuration of alarm notifications
- Up to 50 targets of remote computer shutdown with shutdown agent software
- SNMP v2c/v3 communication – all UPS communication is normalized to RFC 1628 (standard UPS protocol)
- RS232 communication supports all Gamatronic UPS systems through SEC, PowerPlus and Megatec protocols as well as 1UDC+ power systems
- Environmental measurements allow the monitoring of temperatures, humidity and generic sensors with simple configuration
- High voltages and currents can be measured with the assistance of external isolating devices from Gamatronic
- Optional GSM modem allows sending and receiving SMS with configurable alarm notifications
- Comprehensive event configuration is available for controlling the amount of alerts sent to users
- Full featured log includes complete system snapshot saved for every event
- Smart physical design promises easy connections and installation, in both standalone and 19" types
- Magnetic door or window security microswitch
- Isolating current sensor up to 100A for converting AC current to the measured range

FEATURE	GMAC5	G5
Up to 20 recipients for email and SMS notifications of alarms	✓	✓
8 user-configurable message groups for routing alarm notifications	✓	✓
Comprehensive alarm notification can be filtered by message severity	✓	✓
Remote computer shutdowns with shutdown agent software	✓	✓
SNMP v2/v3 communication supported	✓	✓
All UPS communication is normalized to RFC 1628 (standard UPS protocol)	✓	✓
Serial communication supports all Gamatronic UPS systems through SEC, PowerPlus and Megatec protocols as well as 1UDC+ power systems	✓	✓
Serial RS232 port: for UPS or DC power system monitoring	✓	✓
Full log includes complete system snapshot saved for every alarm event	✓	✓
Up to 3 temperature sensors		✓
1 optional humidity sensor		✓
4 analog inputs can be used for generic sensors or for voltage/current measurements		✓
Up to 5 kWh pulse metering		✓
Up to 13 input volt-free contacts: 5 of which can be used for kWh pulse metering and 1 for flood protection.		✓
5 programmable output volt-free changeover contacts		✓
RS485 port for Modbus communication with Building Management Systems (BMS)		✓
Optional GSM modem allows sending and receiving SMS with configurable alarm notifications		✓

Feature	Description
External power supply	12 Vdc 1.5 W
User interface	Password-protected HTTP interface for monitoring and configuration
Ethernet interface	10/100 Base detect
Telnet	Telnet protocol support for basic system configuration
MCU	STM32F207 Cortex M3 @120MHz
Security features	Two levels of security for user interface, full SNMPv3 security
Monitorable power devices	All Gamatronic UPS and DC power systems that utilize any of the following protocols: SEC, Megatec, PowerPlus and 1UDC+
RS232 serial connection	DB9 (to UPS or power system)
Modbus communication	RS485 (RTU and ASCII) and TCP Modbus communication support
Client shutdown software	Shutdown-Agent 50 targets
SMS	3G Sierra Wireless® GSM modem, SIM card slot
Email & SMS alarm notification	Optional 20 targets
SNMP	SNMPv2: Filtering by manager and community SNMPv3: Authentication and privacy features supported
SNMP trap notification	10 targets
Input voltage-free contacts	13, including 5 for kWh monitoring and 1 for flood detection
Output voltage-free contacts	5, programmable (event triggered, auto-return)
Temperature sensor inputs	3
Humidity sensor inputs	1
Analog inputs	4 can be used for voltage and current measurements as well as for generic sensors (0 to 5 volts range, not isolated. Optional isolated converters available)
kWh pulse metering inputs	5
System log	Stores all readings for last 1000 events
Operating Temperature Range	0 °C to +60 °C
Storage Temperature Range	-10 °C to +65 °C
Dimensions WxDxH (mm)	183 x 150 x 40.7 fits 1U (optional 19" 1U extension available)

PSM⁺

Power System Management Software

PSM⁺ is a Windows application that provides continuous, real-time information about the operational status of all the power equipment in the network.

The PSM⁺ supplies live updates about UPS and DC power systems and can monitor individual power supply systems locally or from a remote location.

In case of extended mains failure, PSM⁺ performs an orderly shutdown of selected servers you define. The shutdown procedure is automatically deactivated if mains' power returns before the shutdown was initiated.

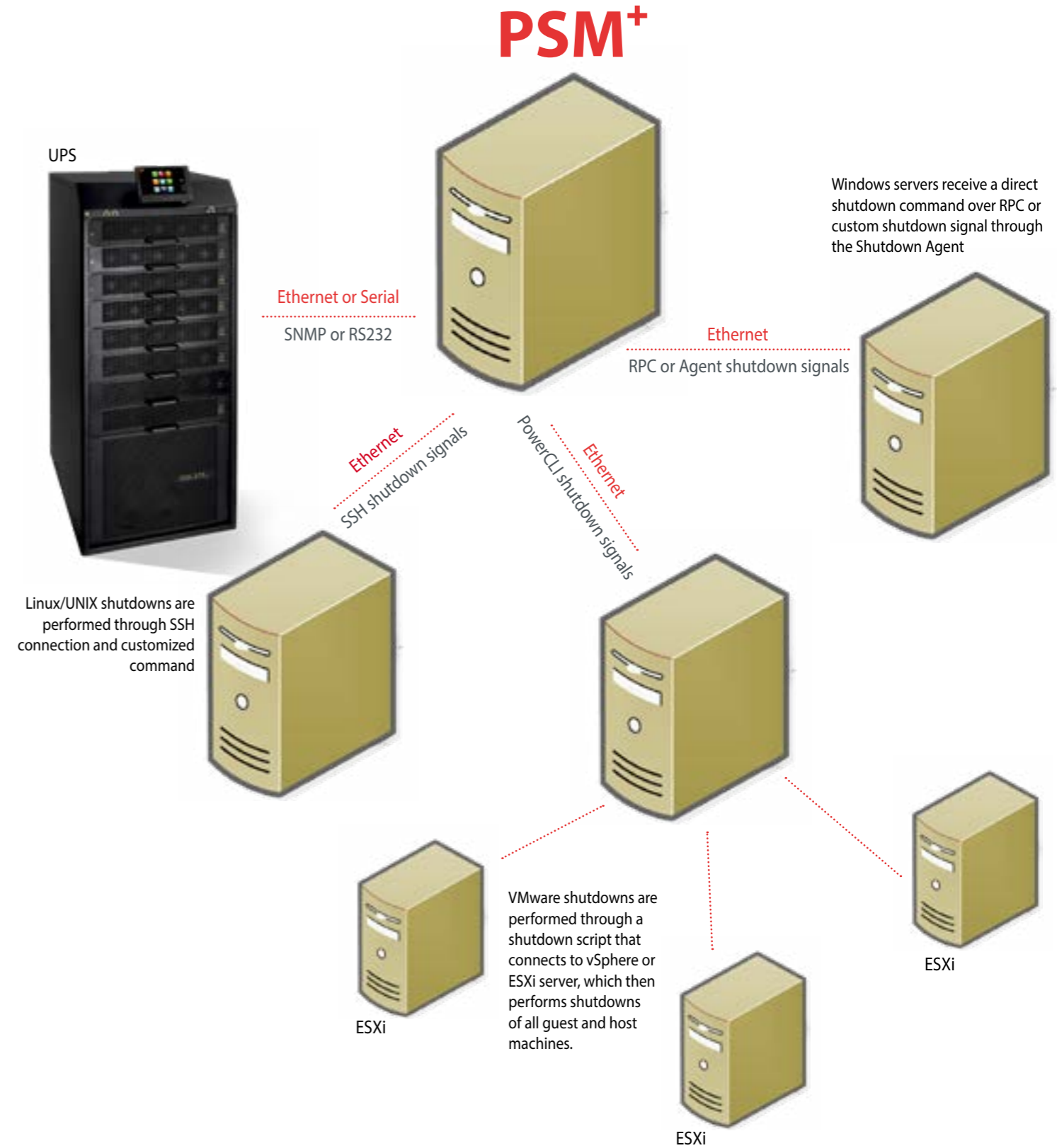
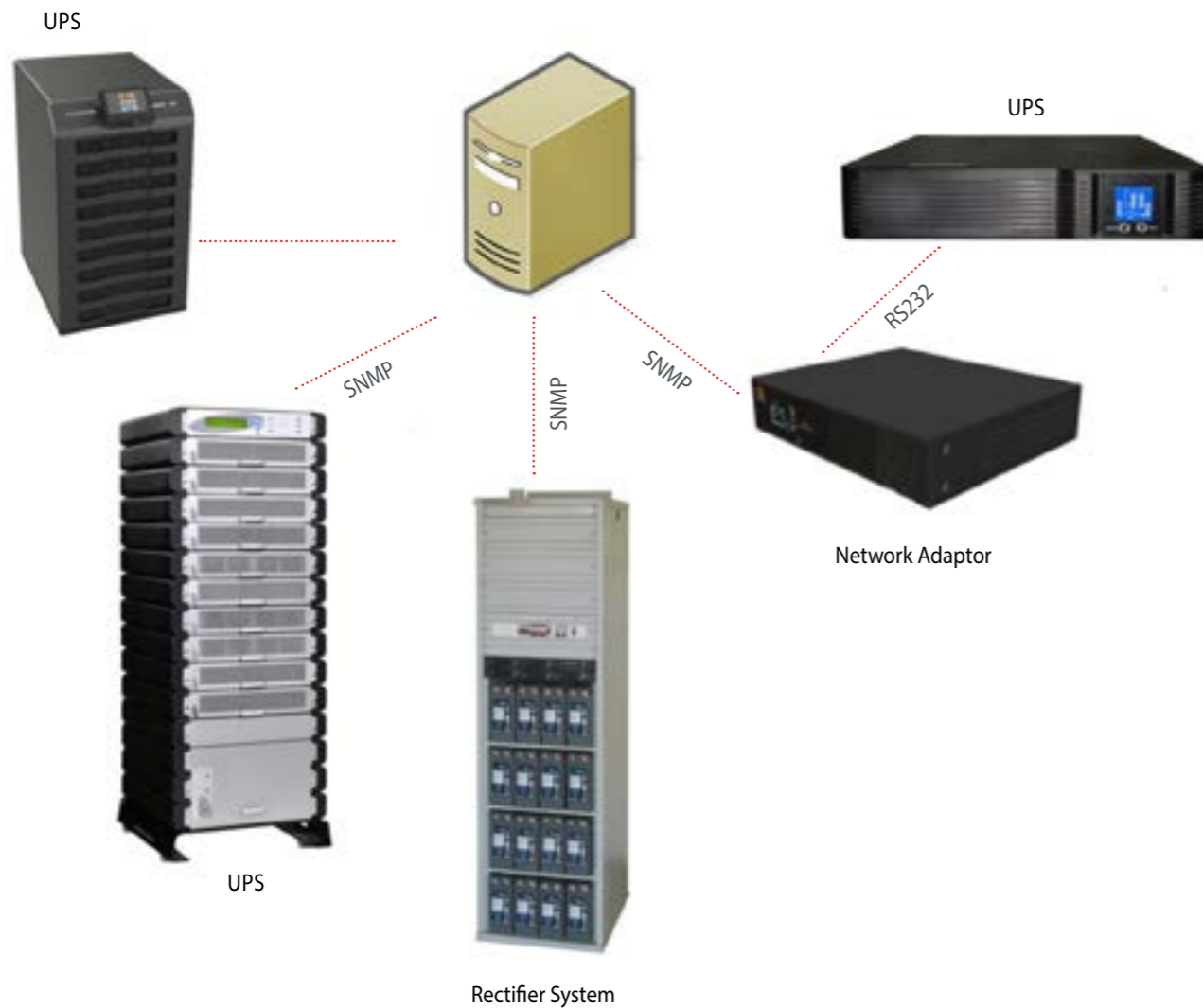
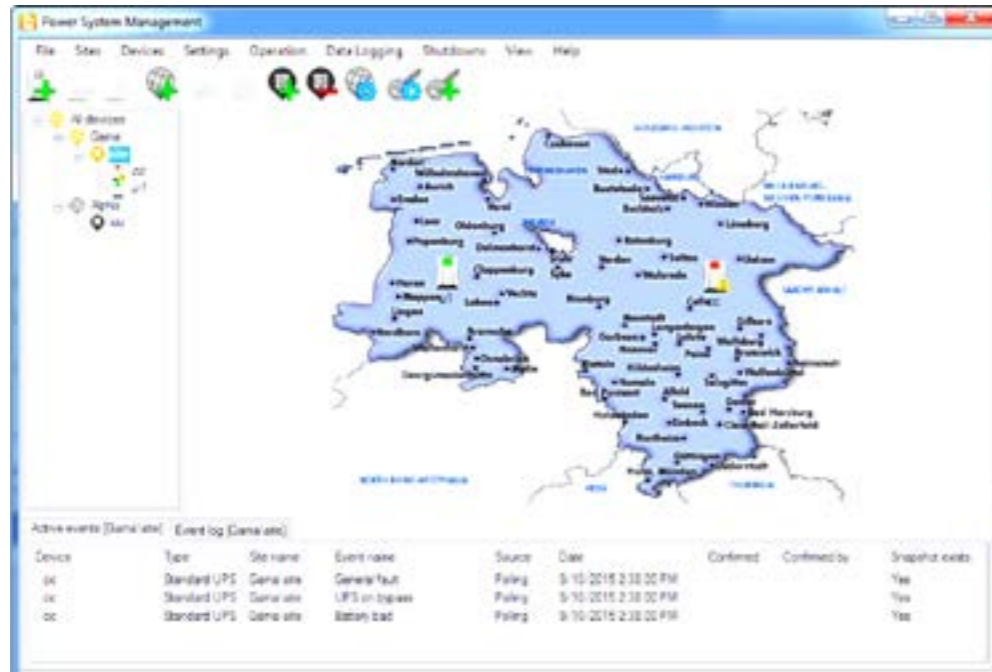


Features

- Simplified and straightforward user interface including tree and map views
- Automatic shutdown of Windows servers over Ethernet via RPC control or a shutdown agent
- Automatic shutdown of UNIX and Linux servers over Ethernet using SSH protocol
- Bulk shutdown of VMware virtual servers and hosts
- Flexibility when defining conditions for automatic server shutdown
- Immediate alarm notification locally via pop-up message and remotely via email.
- Notifications are filterable by event severity
- On-demand simulation of critical events enables you to test the reaction of PSM⁺ and your servers
- Protected interface introduces three levels of security
- Data logging for analysis of UPS static and dynamic parameters

Additional Highlights

Network-connected devices are monitored over SNMPv2 or SNMPv3, using industry-standard RFC1628 protocol. Locally-connected UPSs are monitored over an RS232 serial connection, using SEC or MEGATEC protocol. The event log holds a record of the 500 most recent power system events for each monitored device. Comprehensive on-demand data logging helps reveal issues on site or in the device operation.





Gamatronic, A SolarEdge Division, provides reliable and flexible power solutions to ensure optimal power efficiency. Contact us for more information. Let our team of experts find a solution that would best serve your needs.

Our Power, Your Confidence

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