

GN0116

16-Port Guardian Over the NET™

ALTUSCEN™
Enterprise KVM Solutions by ATEN

The GN0116 Guardian Over the NET™ is designed to offer remote environment monitoring and management of your server room or critical systems. With its remote control and logical configuration features, powerful management capability and scalability, it enables you to build a safe and reliable environment for your server room or data center. An IT administrator is able to real-time monitor the status of the equipments or environment, identify and troubleshoot system problems at an early stage, thereby minimizing repair costs and guaranteeing 24/7 reliable server room/data center monitoring.

With reference to monitoring the status of temperature, humidity, voltage or current for a server room, the GN0116 is equipped with Digital/Analog Input ports which allow you to connect various sensors to monitor and regulate the health of your equipment. In addition, the GN0116 supports Digital Output Ports and Power Outlets to connect various devices including SMS sender, fans, buzzers, warning lights or devices' power. An administrator can configure the logical operations for digital and analog input ports on GN0116 devices to trigger events on the output ports or power outlet, for example sending a message via SMS sender to an administrator when an irregularity occurs. Moreover, the administrator can manually toggle the devices connected to GN0116's output ports or power outlets on or off via an intuitive and convenient GUI.

The GN0116 features dedicated chain ports for flexible expansion to manage even more devices. Up to 255 additional GN0116 units can be daisy-chained down from the original unit.

Furthermore, utilizing logical configuration, you can set a relationship between two devices connected to different GN0116 units. It not only provides remote environment management to large data centers, but also keeps pace with your installation's growth.

ATEN Guardian Over the NET™ offers two connection methods for remote access – Ethernet or Serial (either from modem or a direct terminal connection from a local console) connections. Remote users can monitor and control the status of systems and environments via Browser or ssConsole*.

In addition, the new and free GN0116 Guardian Monitor Center (GMC) software is designed to offer an easy-to-use and convenient User Interface for remote management of your GN0116 units – whether they are daisy-chained or not. Offering a single portal to manage multiple GN0116 units, all regulated data can be displayed in Table View or Chart View for easy monitoring.

Also, the Guardian Monitor Center offers a browser-based User Interface for intuitive and user-friendly operation and configuration. Remotely turn the warning devices or devices' power on or off by simply clicking the buttons on the UI.



In a critical environment, where security is a major concern, such as a server room or data center, keeping systems operating safely and stably in addition to avoiding environment irregularity is a must. The GN0116 Guardian Over the NET™ is an ideal solution for your server room environment monitoring.

» Features

- Remote environmental monitoring and control from any computer connected to the Internet
- 6 Analog inputs and 2 Digital inputs support environmental sensors, including temperature, humidity, voltage, current, intrusion, smoke, leakage, flow, vibration, etc.
- 8 Digital outputs support alarm devices, including buzzer, light, SMS sender, etc.
- 8 programmable AC outlets support remote power control
- Daisy-chain up to 255 additional stations and manage all installed devices in master GN0116 UI
- Modem support for OOB management
- System configuration and data center environmental monitoring via embedded web UI, ssConsole* and Guardian Monitor Center software
- Remotely toggle Power outlets or Digital output ports on/off
- Monitor Refresh Frequency Setting - set screen refresh time intervals and devices status update frequency
- Logical Configuration
 - Configurable event trigger threshold or condition for input ports
 - Configurable relationship and operation logic between input ports and output ports
 - Automatic event triggering when threshold has been exceeded
 - Automatically enable output port to execute pre-defined operation without human intervention or 3rd party software involvement
- Embedded web UI supports 1 Administrator and 4 Users accounts
- Firmware upgradeable
- UL/TUV approved

Guardian Monitor Center Software

- An intuitive, user-friendly GUI for managing and monitoring all GN0116s and network connected devices via single web UI
- Display I/O port value & status in web UI and refresh according to pre-defined time interval
- Power on/off operation executed via a single mouse click in web UI
- Stored historical I/O port data can be displayed via time-based graph chart or exported via .CSV file
- I/O port threshold or condition, severity and automatic control logic configured via web UI
- Event notification sent via SMTP server
- Event log displayed by Category, Device and Severity, and offers search, filter and export (.CSV file) functions
- Back up and restore user system configuration settings
- Multilevel user management defines roles and controls access to GN0116 units – System Administrator, Device Administrator, User, Auditor
- Advanced password rules ensure users create strong passwords
- Stringent login policy features to govern multiple concurrent user logins that include: Multiple User Login Disabled, Password Expiration Enabled, Login Failure Enabled
Login String setting for enhanced security – entry login string along with IP address when user logs in
- IP filtering lets you control who has access to your GN0116 devices
- End session feature - administrators can terminate running sessions for security reasons

* ssConsole (Serial Server Console) is an application program provided with the GN0116 (for Windows environment only).

» Benefits

Remote Environment Monitoring

Via an Internet connection, IT administrators can conveniently observe the environment of their server rooms and data centers from virtually anywhere. Monitor temperature and humidity, in addition to the voltage and current status of critical equipment. Furthermore, users can set environment thresholds (When the humidity reaches a certain level for example) to allow equipment to be monitored for irregularity.

Remote Power Management

There is no need to move back and forth anymore to power on/off servers located in a server room. By simply clicking a button on the browser-based UI, administrators can reset devices, power devices/severs on/off, manually or automatically turn on/off lights, or enable/disable the backup power source. Real-time power control ensures the system/environment operates smoothly, avoids system interruption due to irregularities, and prolongs the lifetime of the systems or devices.

Automatic Control

Administrators can set a logical relationship between an Analog/Digital Input port and Digital Output ports/Power Outlets, such as to turn on the fan plugged into the power outlet of the GN0116 when the temperature (regulated by a sensor connected to an input port) reaches a certain level, or perhaps set off an alarm should smoke be detected. In a multiple GN0116 installation, the administrator can even configure relationships between the ports connected to different GN0116 units. Ultimately, maintenance costs are drastically reduced since constant administrator supervision is no longer required.

Early Warning Notification

The GN0116 supports connection to various alarm devices and/or an SMS sender for early warning. With logical configuration, messages can be sent to administrators when irregularities occur. Also, an email warning can be sent via SMTP server, when a threshold has been exceeded. Necessary actions can be taken to avoid damage or minimize the loss which is caused by irregularities.

Easy Operation - Browser-Based UI

In addition to ssConsole for serial connection, the GN0116 supports an embedded browser-based UI, and the Guardian Monitor Center software which allows all the ports connecting the GN0116 units to be integrated into a Table view or Chart view for monitoring and control. Offering an intuitive and user-friendly Graphical User Interface, the Guardian Monitor Center allows management to record port data to a graph, or export that data to a file.

Powerful Security

The Guardian Monitor Center offers various security settings, including advanced password rules, IP filtering, Login String setting, End session feature and Stringent login policy, greatly enhancing the integrity of your data center or server room.

Flexible Expansion

Up to 255 additional units can be daisy-chained from the original GN0116 unit, providing the right level of hardware deployment to match your budget and expansion requirements. In addition, by utilizing the free Guardian Monitor Center software, all the GN0116 units connected in the same network can be consolidated into a single user interface for easy management.

» **Optional Sensors**

Temperature Sensors are provided with a standard GN0116 package, otherwise, ATEN offers the following models:

EA2110

1 x AC Current Sensor and
1 x Humidity Sensor



EA2210

2 x AC Current Sensors



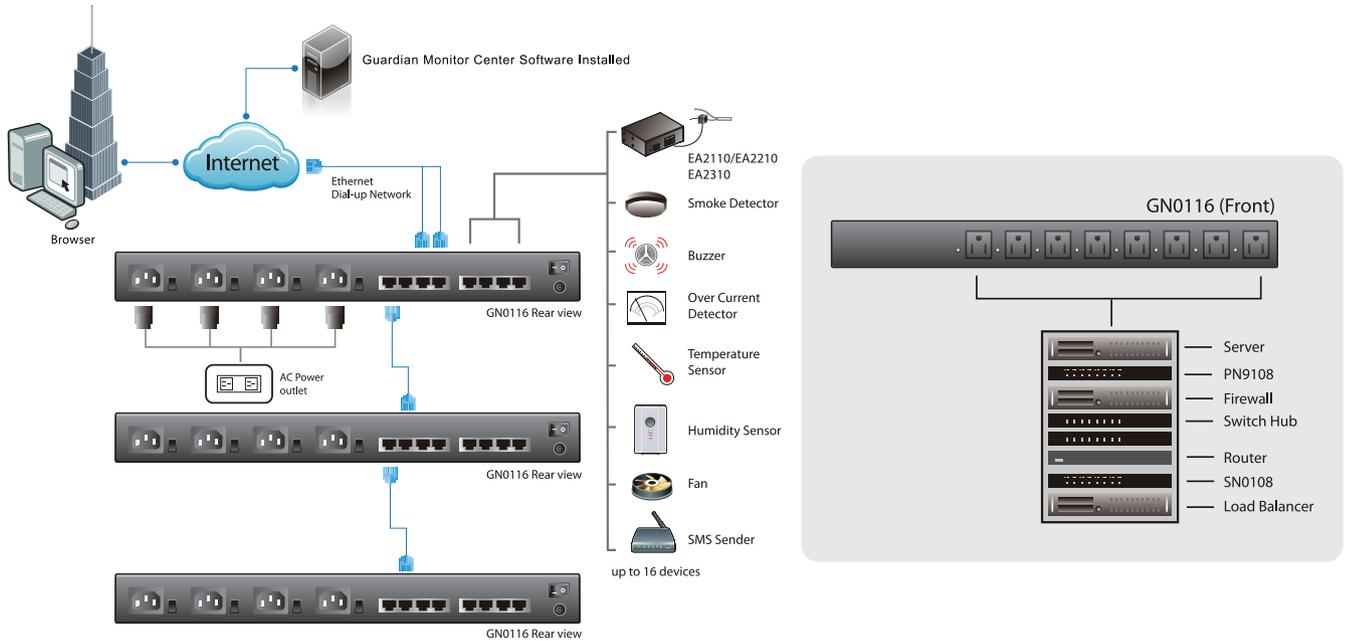
EA2310

1 x AC Current Sensor and
1 x AC Voltage Sensor



Purchases can be made based on your requirements.

» Configurations



» Front / Rear View

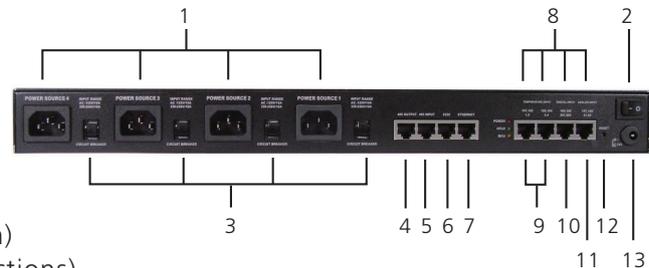
Front View

1. Programmable AC Power Outlets



Rear View

1. AC Power Source Inlet
2. Power Switch
3. Circuit Breaker Switches
4. 485 Output (Daisy-chain In Port)
5. 485 Input (Daisy-chain Out Port)
6. 232C Port (Used for a serial connection)
7. Ethernet Port (Used for browser connections)
8. Digital Output Ports: Ports 101, 102; 103, 104; 105, 106; and 107, 108
9. Resistance Type Analog Input Ports: Ports 1, 2 and 3, 4
10. Digital Input Ports (dry contact): Ports 201, 202
11. Voltage Type Analog Input Ports: Ports 31, 32
12. Reset Switch
13. Power Input



» Specifications

Function		GN0116
Connectors	AC Power Inlets	4 x IEC 60320/C14 Male
	AC Power Outlets (Ports 109~116)	8 x NEMA 5-15R Female; or 8 x IEC 60320/C13 Female
	Power	1 x DC Jack; 12V, 2.5A
	LAN	1 x RJ-45 Female (Black)
	232C	1 x RJ-45 Female (Black)
	485 Output	1 x RJ-45 Female (Black)
	485 Input	1 x RJ-45 Female (Black)
	Resistance Analog Input/Digital Output (Ports 1&2/101&102)	1 x RJ-45 Female (Black)
	Resistance Analog Input/Digital Output (Ports 3&4/103&104)	1 x RJ-45 Female (Black)
	Digital Input/Digital Output (Ports 201&202/105&106)	1 x RJ-45 Female (Black)
Switches	Voltage Analog Input/Digital Output (Ports 31&32/107&108)	1 x RJ-45 Female (Black)
	Reset	1 x Semi-Recessed Pushbutton
	Power	1 x Rocker
	Circuit Breakers	4 x Pushbutton
LEDs	Power	1 (Red)
	CPLD	1 (Green)
	MCU	1 (Yellow)
	AC Power Outlets (Ports 109~116)	8 (Green)
I/P Rating	Power	DC 12V, 2.5A
	AC Power Inlet	125V AC; 50/60Hz; 15A (Max.); or 220 ~ 250 V AC; 50/60Hz; 10A (Max.)
O/P Rating	Digital Output Ports (Ports 101~108)	12V DC; 50mA
	AC Power Outlets (Ports 109~116)	125V AC; 50/60Hz; 15A (Max.); or 220 ~ 250 V AC; 50/60Hz; 10A (Max.)
Power Consumption		DC 12V; 30W
Environment	Operating Temperature	0~50°C
	Storage Temperature	-20~60°C
	Humidity	0~90% RH, Non-condensing
Physical Properties	Housing	Metal
	Weight	2.30 kg
	Dimensions (L x W x H)	44.00 x 15.40 x 4.50 cm

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