

PG8308

30A/32A 8-Outlet 1U Outlet-Metered & Switched eco PDU



Maximize 1U Power Efficiency, Minimize IT Overheads

Cascade up to 64 PDUs with Dual 1G LAN Ports



Note: Each unit ships with a complimentary green LCD console panel sticker. Additional colors are available for purchase.



PG Series Intelligent PDU

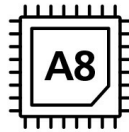
When maintaining operating uptime in a data center or server room, sustainable energy efficiency can make all the difference. The implementation of effective power management often involves improvements at both the hardware and software level. ATEN is introducing its latest PG series of PDUs, available in IEC socket configuration, that are designed with 1U rack housing to accommodate the increasing demand for power to high-density IT equipment in server rooms and data centers. Each PG8308 PDU, utilizing an ARM-Cortex A8 processor, is equipped with 8 port outlets that can power up all connected equipment in less than 10 seconds once plugged in, and delivers the most accurate kWh energy usage data (+/-1%) for better power consumption habits, baselines, and initiative tracking. With energy saving in mind, the PG8308 is purposed to enable lower energy consumption for best practice in a network infrastructure, while promoting up to 35.04 kw equivalent of power consumption of reduced CO2 emission, reduced electricity expenses, and lower carbon taxes to pay each year.

kWh $\pm 1\%$

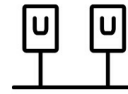
kWh Metering
Precision



Real Time Alert



ARM Cortex-A8
Processor



Dual LAN Network
Redundancy



Energy Saving Relay



Power Monitoring



Environmental
Monitoring



Console Panel
Color Coding



Outlet LED Indicator

2x

Power Efficiency



Real-time Alerts via LCD Display

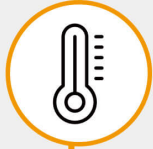
Once connected to an AC power source, the Home screen displays basic PDU readings, including A (Aggregate Current), V (Voltage), W (Power), and kWh (Power Consumption).

The LCD screen lights up red when a Critical, Alert (triggered when a PDU value exceeds a predefined threshold), or Warning (when a value approaches the alert threshold) event is logged.

Environment Sensors

The Sensor port enables RJ-45 connectivity to connect or daisy-chain up to 8 environment sensors (i.e. [EA1640](#), sold separately) for monitoring and management of temperature, humidity, airflow, differential air pressure, and leaks, featuring alerts for potential threats.

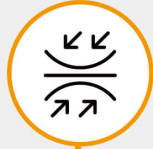
Temperature



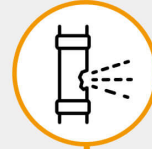
Humidity



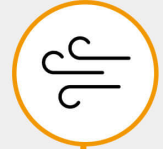
Air Pressure



Leaks



Airflow



EA1640



Serial Device



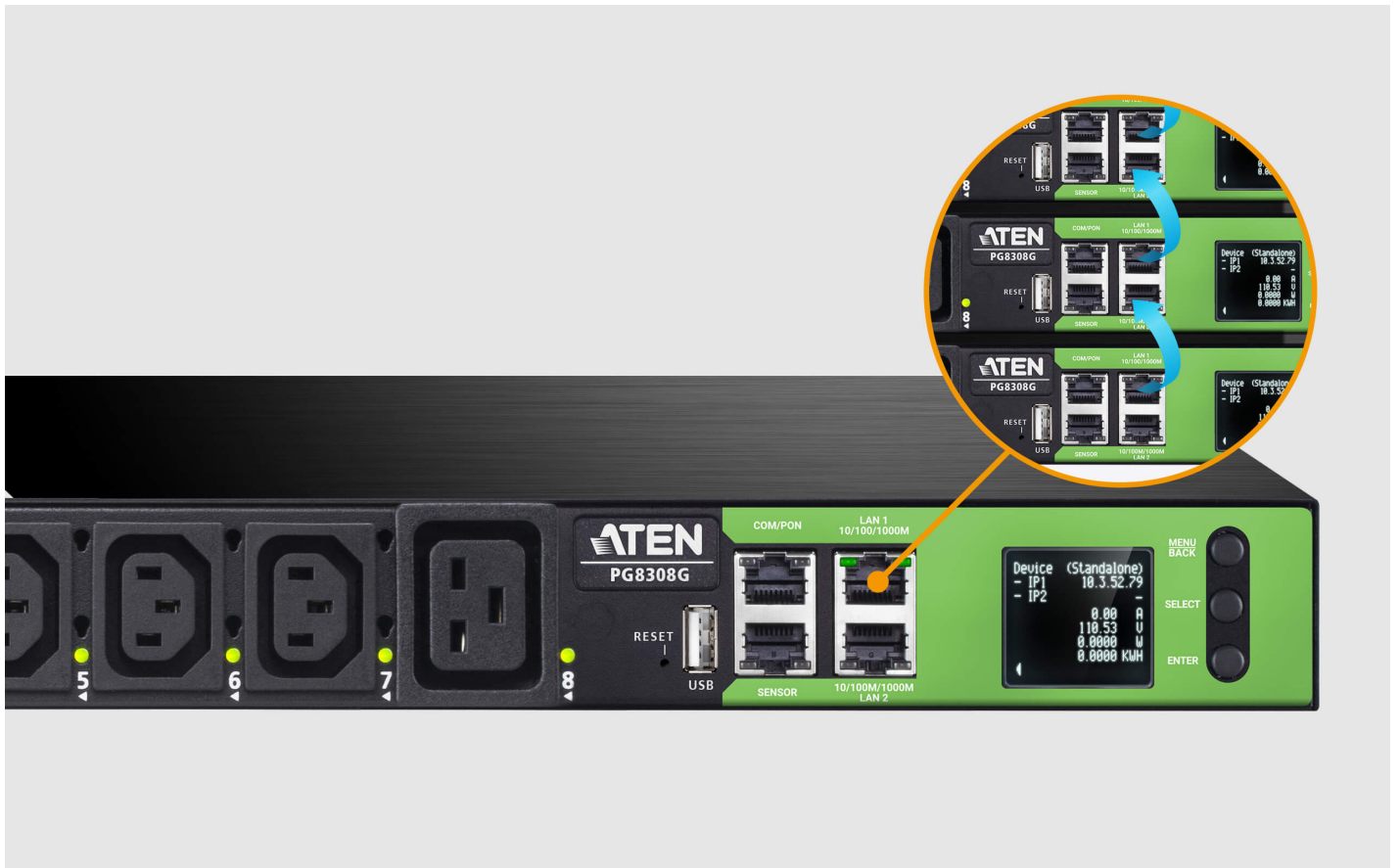
Communicate through RS-232 Protocol

For quick and flexible operation, connecting a serial device to the PDU with its COM port provides another means to undertake communication via CLI commands.

Networkable via WiFi

The PG8308 can be networked via connection to a USB WiFi dongle to perform DCIM, firmware upgrade, log export, quick configuration, and more.



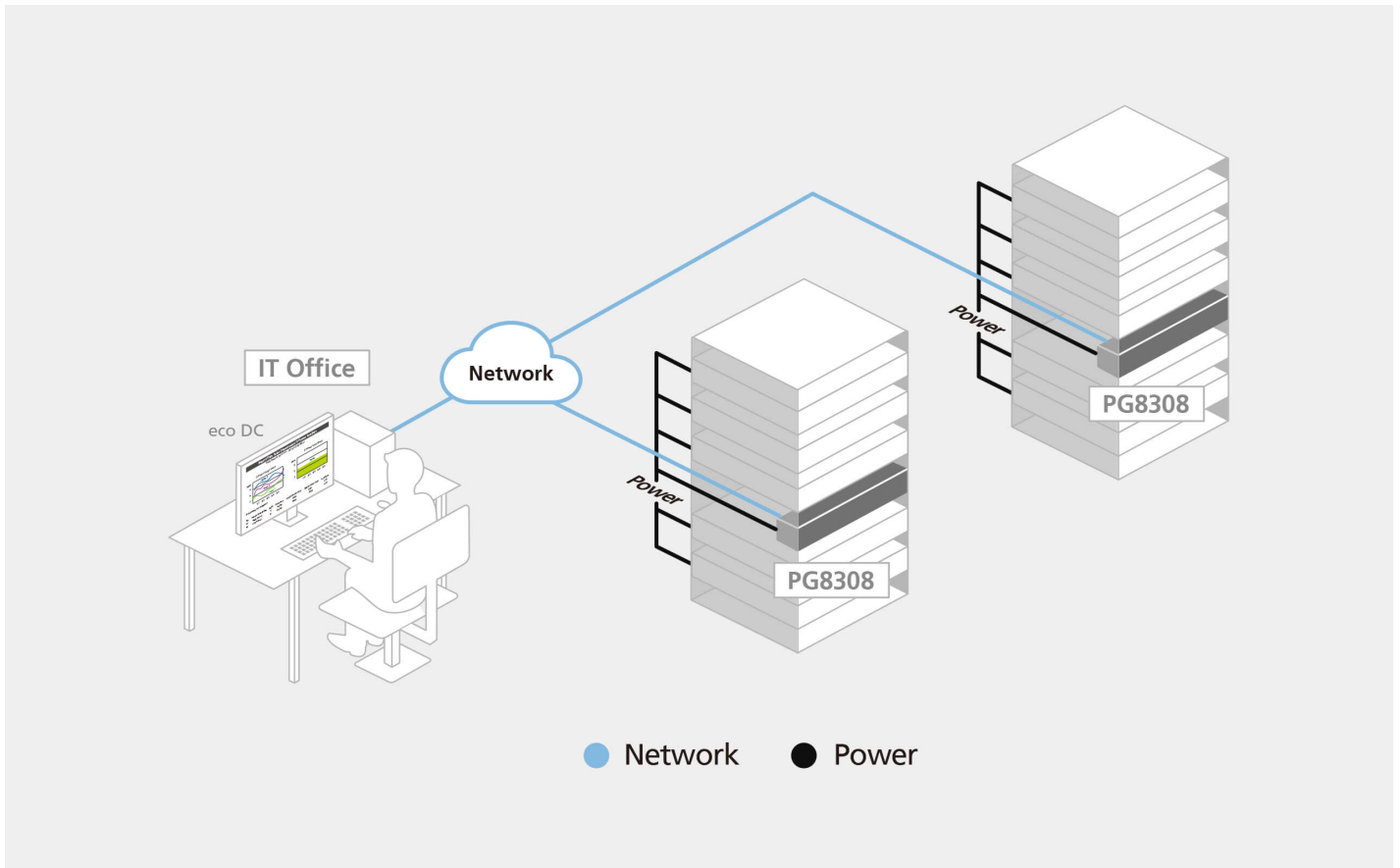


Dual LAN Ports for Scalable Network Setup

The PG8308 is equipped with dual LAN ports (Internet and Intranet) supporting up to 1G Ethernet connection, and can be cascaded to connect up to 64 PDUs, saving expense on installing extra network switches to incorporate network connections while sparing more rack space to accommodate more IT equipment in an expandable network.

DCIM Monitoring

Integrated with ATEN's [eco DC](#) – a PC- and web-based tool for optimized Data Center Infrastructure Management (DCIM) – power distribution, energy, and environmental data from PDUs and connected devices can be monitored via a friendly web GUI for smart power management.



Applications

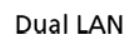
The PG series intelligent PDUs are perfectly suited to server rack installation requiring energy-efficient power distribution to high-density IT equipment in server rooms or data centers.



Talk to Our Experts

If you prefer to have ATEN contact you, please complete the form and a representative will be in touch with you shortly

Downloaded from <http://ajph.org/> on November 10, 2014



Metering Precision

Features

ATEN's PG8308 outlet-metered & switched series intelligent PDU features 8 outlets ¹ housed in a compact 1U rack enclosure.

With an ARM Cortex-A8 processor, these PDUs provide advanced control options through USB, COM, environmental sensors, and dual Gigabit LAN ports.

Designed for rapid deployment, PG series PDUs can power all connected equipment within just 10 seconds of being plugged in. For enhanced cost efficiency and space optimization, these intelligent PDUs can be cascaded, allowing interconnection of up to 64 units.

The PG series PDUs are equipped with RJ-45 sensor ports to connect with [EA1640](#) that monitor the health of the data center environment, ensuring optimal operating conditions. They offer secure, centralized, and intelligent power management capabilities, allowing users to power on, off, or cycle data center IT equipment such as servers, storage systems, KVM switches, network devices, and serial data devices.

With the integration of remote power control and real-time power measurement, users can manage and monitor the power status of devices connected to the PG series PDUs from virtually anywhere with an IP connection. This functionality is accessible at the PDU device, bank, or outlet level, depending on the specific model.

These intelligent PDUs are capable of handling high voltage ranges of 100V to 240V. Additionally, they provide precise kWh energy usage data with an accuracy of $\pm 1\%$. This level of precision enhances the monitoring of power consumption, aids in the establishment of baseline energy usage, and supports the tracking of energy efficiency initiatives.

In terms of hardware design, the PG series PDUs incorporate built-in energy-saving relays – subtypes of electromagnetic switches – to manage large current flows more efficiently, resulting in lower energy consumption compared to non-relay models. The built-in circuit breaker on the PG series models support current flows of 30A or 32A, automatically disconnecting the power supply to prevent overloads and protect connected devices from damage.

The firmware of the PG series is upgradeable via web GUI or USB, allowing users to conveniently download updates from ATEN's website, ensuring access to the latest functionalities and improvements for practical use.

Green LCD console panel sticker is included for users, with additional options in blue, yellow, red, and purple available for purchase ². This color-coding system enhances the ability to differentiate between power feed settings and facilitates more efficient troubleshooting.

The PG series intelligent PDUs are ideally suited for enterprise server rooms, network closets, and data centers, providing an intelligent power distribution and management solution that meets the demands of high-density IT applications while optimizing overall costs.

Note: 1. PG8308A contains 8 \times NEMA 5-20R socket configurations; PG8308B / PG8308G contains 6 \times IEC60320 C13 and 2 \times IEC60320 C19 socket configurations.

2. The LCD console panel sticker is sold in units of 10 pieces. MOQ can be discussed based on customer requirements.

• Connections

- Supports 1Gbps Ethernet Interface
- Remote Management Protocols – TCP/IP, UDP, HTTP, HTTPS, SSL, DHCP, SMTP (TLS 1.2), ARP, NTP, DNS, Auto Sense, Ping, SNMP V1, V2, and V3, Telnet, Modbus (over TCP/IP), Wi-Fi, and IPv6
- Scripting – JSON-RPC (Remote Procedure Call) protocol and Python scripting to control specified PDU units
- Security – 2-level account/password login access, and IP/MAC filter, 128 bit SSL
- Authentication – RADIUS, LDAP, TACACS
- Supports [eco DC](#) and multiple browsers (IE, Firefox, Chrome, and Safari)
- Supports RS-232 and RS-485 communication ports
- Auto Ping & Reboot
- Environment sensor port enables RJ-45 connectivity to connect or daisy-chain up to 8 ATEN [EA1640](#) environment sensors for monitoring and management of temperature, humidity, airflow, differential air pressure, and leaks, featuring alerts for potential threats (sold separately)
- Rotatable LCD Screen – capable of 180-degree rotation, delivering flexible in-rack installation

• Metering

- Secure locking enhancement prevents power cords from becoming unplugged due to vibration or human error
- Metering and monitoring of power at the PDU and outlet levels
- Measuring and establishing threshold levels for current, voltage, power, power dissipation, temperature, and humidity
- Precise kWh metering ($\pm 1\%$) for better power consumption habits, baselines, and initiative tracking
- Real-time alerts via LCD display notify users of unusual power states:
 - Home Screen Readings: A (aggregate Current), V (voltage), W (power), kWh (power consumption)
 - Types of Alerts: Critical, Alert (value exceeds a predefined threshold), Warning (value approaches alert threshold)

• Network

- Dual Ethernet ports support cascading up to 64 PDUs
- Daisy chaining functions support SNMP & Modbus protocols and TC / IP protocols (web page)
- Supports ATEN's [eco DC](#) (Energy & DCIM Management Web GUI) for monitoring power distribution, energy, and environmental data from PDUs and connected devices

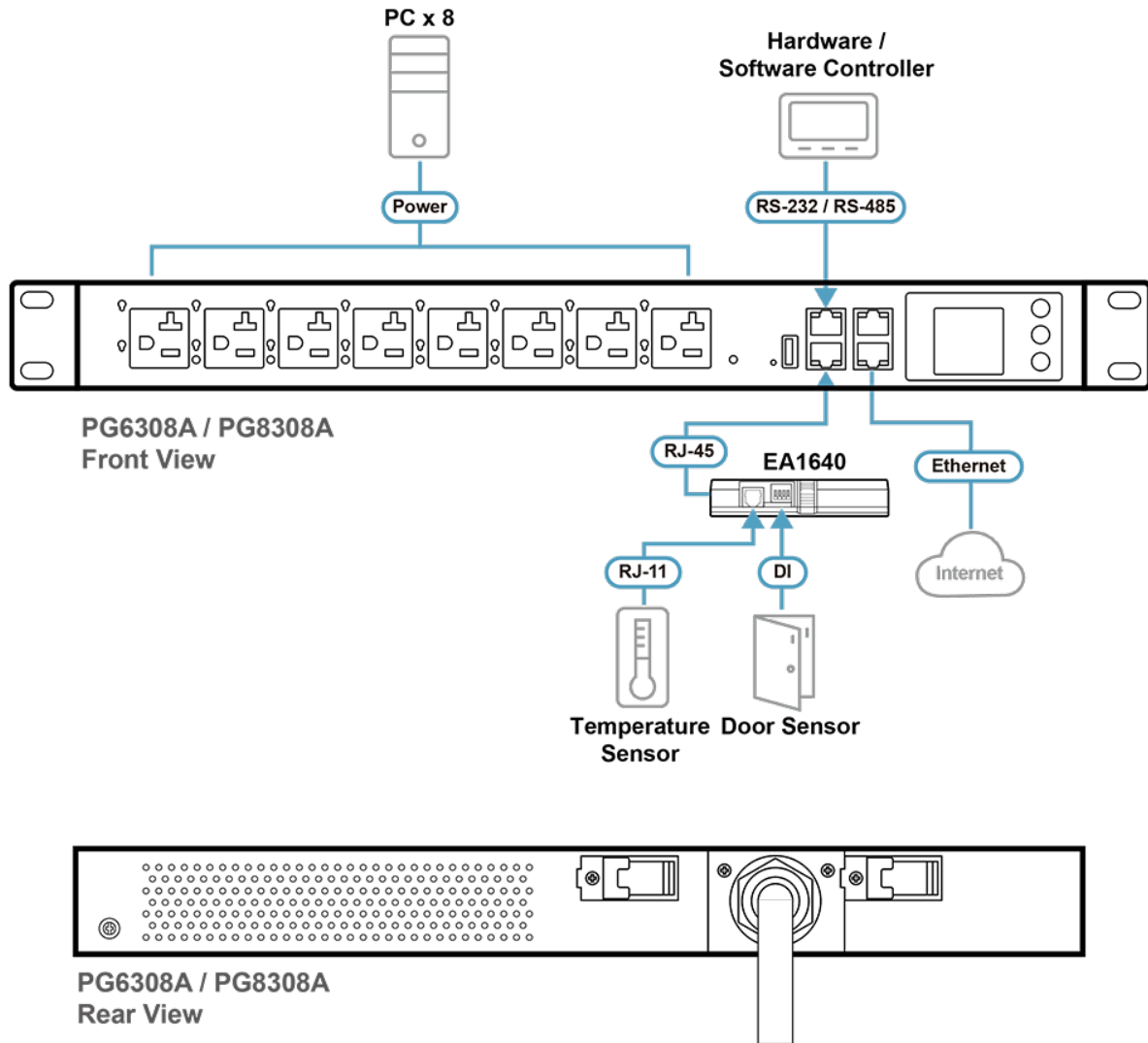
• Outlet Switch Control

- Remote power outlet control (On/Off, Power Cycle) by individual outlets and outlet groups
- Outlet group support at the PDU level
- Supports multiple power control methods – Wake on LAN, System After AC Back, Kill the Power
- Power-On/Off sequencing – users can set the power-on sequence and delay time for each outlet to allow equipment to be powered on in the correct order
- Proactive overload protection (POP) – automatically powers off the last outlet, causing the current overload, while allowing users to set shutdown priority
- Schedule Control
- When the temperature or humidity sensor value reaches the predetermined threshold, the PDU can turn on, off, or reboot a particular outlet
- Energy-efficient relays allow operators to control large amounts of current flow for lower energy consumption

Specifications

Function	PG8308A	PG8308B	PG8308G
Electrical			
Nominal Input Voltage	100 – 120 VAC	100 – 240 VAC	100 – 240 VAC
Maximum Input Current	30A Max ,24A(UL)	30A Max ,24A(UL)	32A Max
Input Frequency	50-60 Hz	50-60 Hz	50-60 Hz
Input Connection	NEMA L5-30P	NEMA L6-30P	IEC 60309 32A
Input Power	3600VA(Max),2880VA(UL)	7200VA(Max), 5760VA(UL)	7680VA(Max)
Outlet Type	(8) NEMA 5-20R	(6) IEC320 C13+(2) IEC320 C19	(6) IEC320 C13+(2) IEC320 C19
Nominal Output Voltage	100 – 120 VAC	100 – 240 VAC	100 – 240 VAC
Maximum Output Current (Outlet)	20A(Max), 16A(UL)	C13:15A(Max),12A(UL) C19:20A(Max),16A(UL)	C13:10A(Max) C19:16A(Max)
Breakers	UL489x2	UL489x2	UL489x2
Metering	Per Outlet level Current, Voltage , PF and KWh Monitoring	Per Outlet level Current, Voltage , PF and KWh Monitoring	Per Outlet level Current, Voltage , PF and KWh Monitoring
Outlet Switching	Yes	Yes	Yes
Environment Sensor Ports	1xRJ45	1xRJ45	1xRJ45
USB 2.0 Type-A Port	Yes	Yes	Yes
Ethernet Port	10/100/1000M	10/100/1000M	10/100/1000M
PON + COM Port	1xRJ45	1xRJ45	1xRJ45
Metering Accuracy	1%	1%	1%
Physical Properties			
Dimensions (L x W x H)	43.24 x 21.00 x 4.40 cm (17.02 x 8.27 x 1.73 in.)	43.24 x 21.00 x 4.40 cm (17.02 x 8.27 x 1.73 in.)	43.24 x 21.00 x 4.40 cm (17.02 x 8.27 x 1.73 in.)
Weight	4.65 kg (10.24 lb)	4.65 kg (10.24 lb)	4.65 kg (10.24 lb)
Power Cord Length	3M(SR+NEMA L5-30P)	3M(SR+NEMA L6-30P)	3M(SR+IEC60309 32A)
Environmental			
Temperature (Operating / Storage)	0 – 60°C / -20 – 60°C	0 – 60°C / -20 – 60°C	0 – 60°C / -20 – 60°C
Humidity (Operating & Storage)	0 – 80% RH, Non-Condensing	0 – 80% RH, Non-Condensing	0 – 80% RH, Non-Condensing
Compliance			
EMC Verification	FCC	FCC	CE
Safety Verification	UL,PSE	UL,PSE	CE,UKCA
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.		

Diagram



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