

## SAGEON® III SERIES

### DC POWER SYSTEM

48VDC | 600 or 1200A



The Sageon® III are the largest 'Intelligent Power' systems in the Sageon® Family. They are simple to operate, with built-in intelligence to minimize manual adjustments and measurement settings, while providing information about system health and reliability.

The Sageon® III systems are capable of delivering 600A (28kW) or 1200A (56kW) N+1 blocks of power for -48V applications and include up to 60 distribution breakers, all in a single 7ft bay.

The basic Sageon® components of smart rectifier, controller and flexible distribution enable this system to be easily sized.

The Sageon® family of power systems products will always accommodate your changing power needs and is designed to allow you to remotely view, record and act upon all the data from a site. The Sageon® III gives you the capability of battery and site monitoring demanded in today's market.

#### FEATURES AND BENEFITS

##### High density

Compact design with rectifiers at 9 watts per cubic inch, minimizing floor space necessary for installation

##### Front accessible

Installation, repairs, and maintenance are made easier, saving time and money

##### Modular design

Expandable, scalable, and flexible for changing power needs

##### Remote access

Remotely monitor and control the complete power systems, reducing trips to the site

##### Battery Monitoring

Sageon® Battery Monitoring will measure the voltage in each cell in your system and alarm when the voltage goes out of spec - Knowing the Health of your system is key to up time

##### Site Monitor

The SSM provides additional I/O for the power plant, enabling users to monitor the status of additional equipment through the Sageon system

##### Battery testing

Automatic or on-demand battery testing, insuring batteries are functioning properly

Sageon® III is scalable, flexible, accessible and configurable. The power system you buy from UNIPOWER today will support your needs as you grow and expand. The Sageon® III Power System's distribution is scalable and upgradeable, enabling build-out in six rack unit increments (6RU). Being able to upgrade and add-on as needed saves on infrastructure build-out cost; and doing this while the system is hot means you won't have to bring in an alternative power source during the upgrade.

The Sageon® III accommodates AM1 and GJ1 breakers - mix and match these components into almost any combination. One distribution section (5RU) is capable of 20 AM1 positions, and Sageon® III accommodates up to a total of three distribution sections. The Sageon® III unique design includes an internal ground return bus with individual landings.

100% front access. Regardless of what needs to be done to Sageon® III, whether maintenance or expansion, the front accessibility makes it easy.

## MONITORING & CONTROL

Sageon® is control. The Sageon® III Power System has a single point of adjustment for multiple bays of rectifiers, controlling up to 225 rectifiers and four strings of batteries. The controller contains a large easy to read, two-line by 16-character backlit LCD display, and allows users to view and adjust plant operating parameters and alarms. With Sageon® III, monitoring can be done via a local computer interface and remotely by TCP/IP SNMP communication. (see separate [SageNET-3 information](#).)

## BATTERY STRINGS

Sageon® III is a complete system. The Sageon® III Power System comes standard with internal battery string termination for multiple battery strings and accommodates batteries from most manufacturers to enable build-out of current systems integrated with Sageon® III's exceptional features. Safe, periodic battery discharge testing provides early detection of a potential battery problem, resulting in increased uptime. UNIPOWER incorporates automated user definable testing, monitoring for up to four battery strings, and load testing into Sageon® III to predict and prevent battery failure.

## RECTIFIERS

Sageon® is reliability. Every piece of the Sageon® III Power System was designed with intelligence and the rectifiers are no exception. These units are auto-voltage adjusting, self-protecting to avoid thermal overload and are auto load sharing with self-diagnostics reported through the controller. In the unlikely event of a controller failure, Sageon® III's rectifiers operate without it to ensure continuous reliability.

## CABINET

Sageon® is strength. The standard 24in (610mm) cabinet supports installation of 23" user equipment.

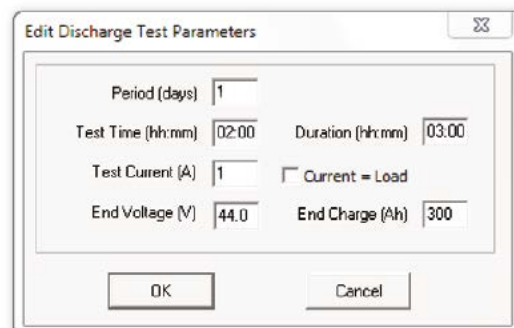
The Sageon® III Power System performs in adverse conditions to ensure system dependability.

With front accessibility and a locking front door, the Sageon® III Power System's performance will not be compromised.

## BATTERY TESTING

The Sageon® III Power System incorporates many years of UNIPOWER battery knowledge. This expertise is embedded in the [SageView™ software](#) and is only a keystroke away. This added insight lets the user quickly gauge the overall health of the power system.

Battery discharge tests can be initiated and recorded remotely with no external equipment and no disruption to the wiring or configuration of the power system, resulting in greater power security at a reduced cost.

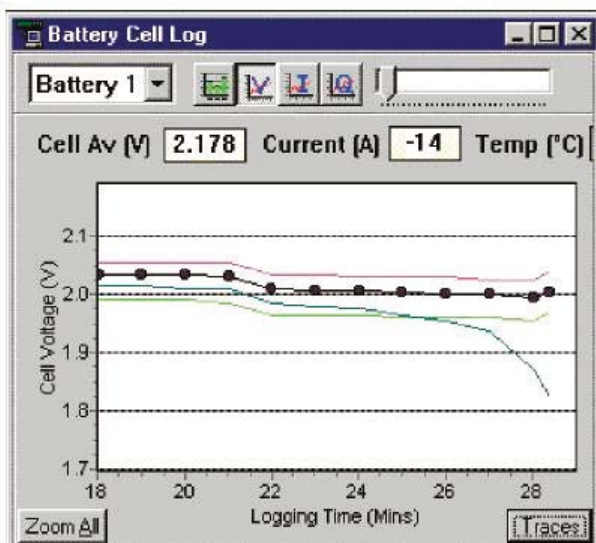
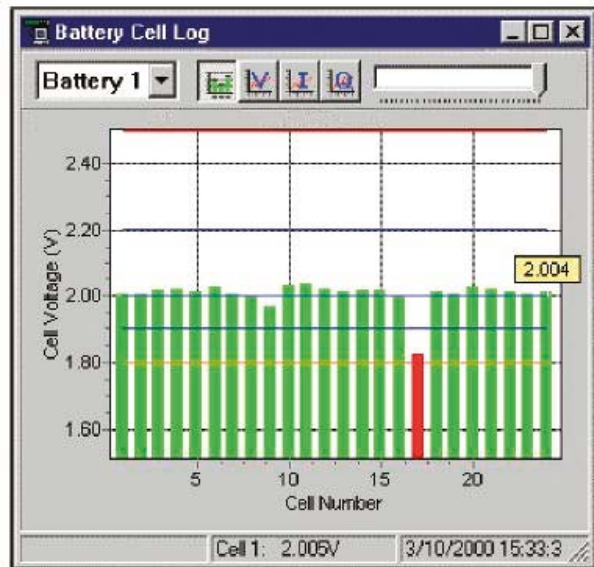
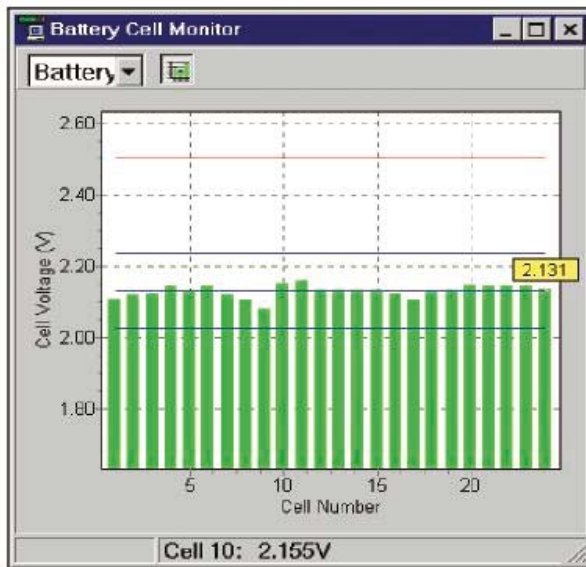


### OPTIONAL BATTERY MONITORING

Optional Battery monitoring allows you to monitor the health of each battery remotely and remote load testing.

### SITE MONITORING

[Sageon Site Monitor](#) provides additional I/O for the power plant enabling users to monitor the status of additional equipment through the SAGEON system.



**Battery Cell Monitor**

Parameter	Value
Current	0 A
Cell 1 Volts	2.110 -1%
Cell 2 Volts	2.120 -1%
Cell 3 Volts	2.125 +0%
Cell 4 Volts	2.145 +1%
Cell 5 Volts	2.130 +0%
Cell 6 Volts	2.145 +1%
Cell 7 Volts	2.120 -1%
Cell 8 Volts	2.105 -1%
Cell 9 Volts	2.075 -3%
Cell 10 Volts	2.155 +1%
Cell 11 Volts	2.155 +1%
Cell 12 Volts	2.135 +0%
Cell 13 Volts	2.135 +0%
Cell 14 Volts	2.125 +0%

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature Range	-13°F (-25°C) to 122°F (50°C)
Full Power Temperature Range	-13°F (-25°C) to 158°F (70°C)
Storage & Transport Temperature	-40°F (-40°C) to 158°F (70°C)
Humidity	0 to 95% RH non-condensing
Altitude	9,800 ft. (2,987 m)
Heat Dissipation	1020 BTU/Hr. maximum per rectifier
Cooling	Forced air, front to back, auto-regulating
Acoustic Noise	<45db (80% load, 25°C); <55db (100% load, 50°C) (A weighted)

**PHYSICAL SPECIFICATIONS**

Height	84in (2134mm)
Width	24in (610mm)
Depth	24in (610mm)
Weight	575lb (261kg)

**7FT SAGEON III POWER SYSTEM**

