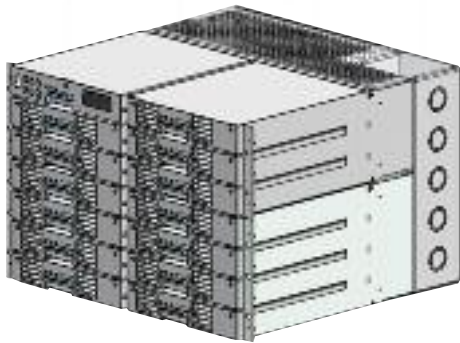


## SAGEON® II POWER MODULE (400A & 600A)

For telecommunications, industrial, and utility applications.



### FEATURES AND BENEFITS

#### High Density

Compact design with rectifiers at up to 16.1 watts per cubic inch, minimizing space required for installation

#### Remote Access (Optional)

Remotely monitor and control the complete power system, reducing trips to site and increasing uptime

#### Battery Testing (Optional)

Automatic or on-demand battery testing, ensures batteries are functioning properly under real world load conditions

#### Battery Monitoring (Optional)

Continuous, individual cell level monitoring, providing 24 hour automated out-of-tolerance alarming and detailed identification by cell number

#### Programmable Battery Recharge Current (Optional)

Programmable recharge current limit eliminates overcharging of standby batteries, extending their useful service life

#### Wide Input Voltage Range

Operating voltage range from 85 to 285 volts AC increases flexibility and ensures unit functions under diverse conditions

#### Common Family

The SAGEON II Power Module is part of the SAGEON Family of DC Power Plants which all feature a common controller, monitor and control software, and remote communications modules; eliminating the learning curve

SAGEON is intelligent power. SAGEON, the latest development in power systems, is simple to operate yet genius in delivering enhanced, built in intelligence. SAGEON Power Systems minimize manual adjustments and measurements, while providing you with the information you need to manage power.

The SAGEON II Power Module the next advancement in the Sageon offering. This new design will be offered in two bulk power sizes 600A (N+1) and 400A (N+1), the Sageon II Power Module provides the flexibility to put power where it is needed.

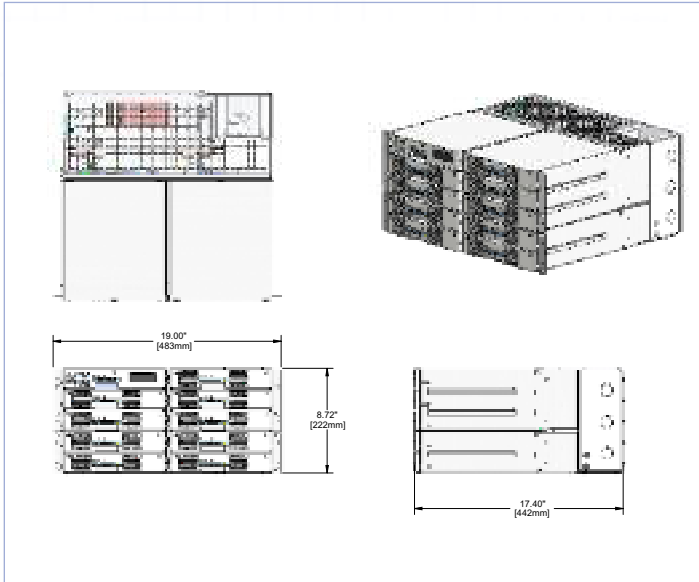
The Sageon II Power Module consists of a power frame that includes the Sageon Controller and Rectifiers, mechanical mounting for up to nine rectifiers in the 400A offering and thirteen rectifiers in the 600A system. Each unit comes with an AC conduit box for ease of installation.

In addition to the basic control functions, the Sageon II Power Module supports all the advanced functionality available in all Sageon Family of product including: remote monitor and control, battery testing, individual cell monitoring, programmable battery recharge current, and site monitoring.

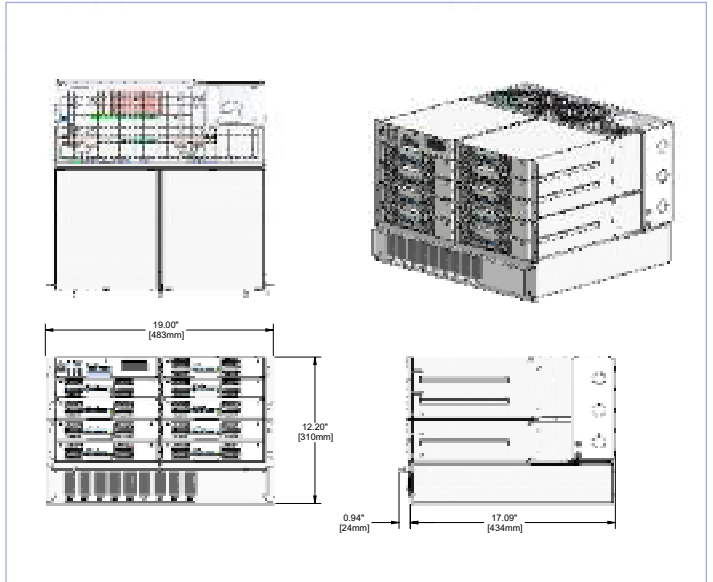
### APPLICATIONS

- Bulk Power
- System Expansion
- Outside Plant
- Homeland Security Networks
- Power System Upgrade
- Controlled Environment Vaults
- Wireless Sites
- Microwave Sites
- Cable / Internet
- OEMs

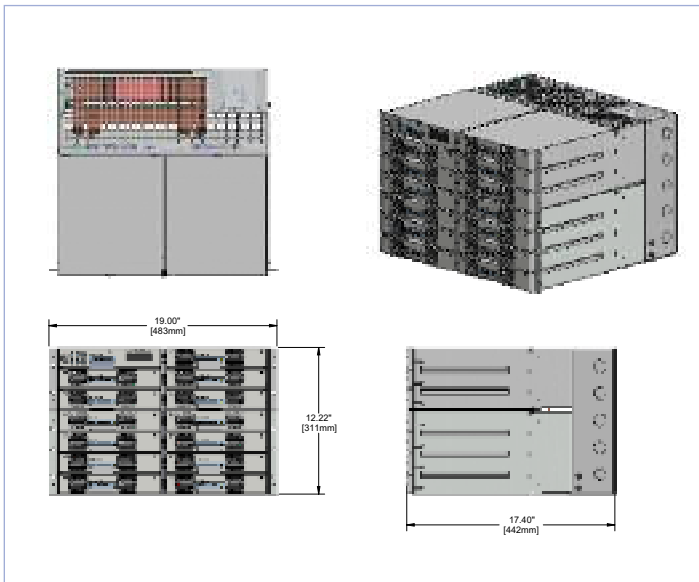
BASE BULK POWER PLANT		LIST
-48V BULK 19" POWER PLANT INCLUDES: CONTROLLER, ALARM BOARD, 5RU POWER SHELF SET UP TO 9 EACH RECTIFIERS WITH 9 AC FEEDS	400A 5RU	40
SUPPORTS: 9 RECTIFIERS, ONE AMBIENT AND ONE BATTERY TEMPERATURE PROBE		
SAME AS LIST 40, EXCEPT WITH 9 AC CIRCUIT BREAKERS (4CT's Temp Probes will support up to 4 battery strengths	400A 7RU	41
-48V BULK 19" POWER PLANT INCLUDES: CONTROLLER, ALARM BOARD, 7RU POWER SHELF SET UP TO 13 EACH RECTIFIERS WITH 13 AC FEEDS	600A	60
SUPPORTS: 13 RECTIFIERS, ONE AMBIENT AND ONE BATTERY TEMPERATURE PROBE		
SAME AS LIST 60, EXCEPT WITH 3RU EXPANSION	600A	61
SAME AS LIST 61, EXCEPT WITH 13 AC CIRCUIT BREAKERS (4CT's Temp Probes will support up to 4 battery strengths	9RU	
<b>OPTIONS: ORDER BY PART NUMBER</b>		<b>PART NUMBER</b>
<b>RACK MOUNTING - (FLUSH MOUNT ONLY)</b>		
23" RACK FLUSH MOUNT		
LIST 40	OPT	385.5202.4023
LIST 41	OPT	385.5202.4123
LIST 60	OPT	385.5202.6023
LIST 61	OPT	385.5202.6123
<b>BATTERY Current Transducers (LIST 40, 41, 60, 61)</b>		
200 AMP CLOSED WINDOW (1.25" dia. window)	OPT	385.5971.200
200 AMP SPLIT WINDOW (0.84" dia. window)	OPT	385.5972.200
400 AMP CLOSED WINDOW (1.25" dia. window)	OPT	385.5971.400
400 AMP SPLIT WINDOW (0.84" dia. window)	OPT	385.5972.400
600 AMP CLOSED WINDOW (0.82" x 2.5" window)	OPT	385.5971.600
800 AMP SPLIT WINDOW (1.57" x 4.0" window)	OPT	385.5972.800
<b>Communications</b>		
Ethernet TCP/IP (LIST 40, 41, 60, 61)	OPT	385.4014.00
Ethernet TCP/IP-SNMP (LIST 40, 41, 60, 61)	OPT	385.4015.00
<b>Temperature Compensation</b>		
BASIC TEMP COMPENSATION OPTION (LIST 41, 61)	OPT	385.5201.15
BASIC TEMP COMPENSATION (LIST 40, 60)	INC	NC
List 40 and 60 have the capability to accept 1 ambient and 1 battery temperature. The 41-61 four battery string temp comp board is included. Ambient and battery temp sensors must be ordered separately for all Sageon II Systems.		
<b>Temperature Sensors</b>		
10' (3m) CABLE LENGTH	OPT	385.5941.03
20' (6m) CABLE LENGTH	OPT	385.5941.06
50' (15m) CABLE LENGTH	OPT	385.5941.15
100' (30m) CABLE LENGTH	OPT	385.5941.30
<b>Battery Monitor (REQUIRES BOTH BATTERY WIRE AND POST PIG-TAIL ADAPTOR)</b>	OPT	385.5201.20
<b>Battery Sense Wire</b>		
BATTERY SENSE length 10'	OPT	350.7812.10
BATTERY SENSE length 25'	OPT	350.7812.25
BATTERY SENSE length 50'	OPT	350.7812.50
BATTERY SENSE length 100'	OPT	350.7812.100
<b>Battery Post Lug Size (pig-tail) adaptor</b>		
BATTERY POST ADAPTOR KIT #10	OPT	385.6151.03
BATTERY POST ADAPTOR KIT 1/4" (6mm)	OPT	385.6151.04
BATTERY POST ADAPTOR KIT 5/16" (8mm)	OPT	385.6151.05
BATTERY POST ADAPTOR KIT 3/8" (10mm)	OPT	385.6151.06
BATTERY POST ADAPTOR KIT 1/2" (12mm)	OPT	385.6151.07
<b>Rectifiers - 48 Volt 50 AMP</b>		
List 40, 41 (UP TO 9 RECTIFIERS PER SYSTEM)	REQ	100.7675.4850
List 60, 61 (UP TO 13 RECTIFIERS PER SYSTEM)	REQ	100.7675.4850
<b>Site Monitor (EXTERNAL PANEL)</b>	OPT	385.5201.21



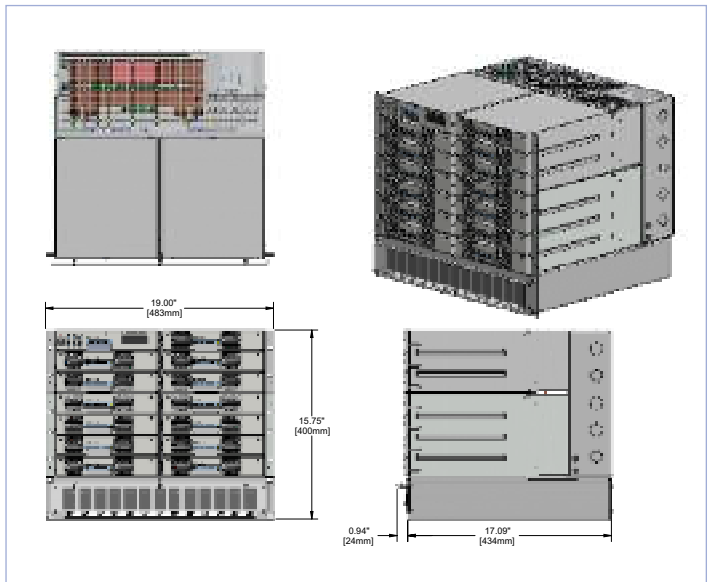
**400A BULK  
LIST 40  
35 LBS.**



**400A BULK  
WITH 3RU BOX  
LIST 41  
55 LBS.**



**600A BULK  
LIST 60  
40 LBS.**



**600A BULK  
WITH 3RU BOX  
LIST 61  
60 LBS.**

## SPECIFICATIONS

### Input AC:

Voltage	Universal AC 85-300VAC (L-N, 1phase) Fully protected up to 440VAC (L-N)
Inrush Current	<16A RMS per rectifier
THD	Line Harmonics meet EN61000-3-2
Power Factor	>0.98 for >50% output power

### Output DC:

Voltage	-48VDC systems, adjustable range 42.0V to 59.5V
Current Limit	55A per 48V rectifier module. Fully adjustable
Power Limit	2400W per rectifier module
Efficiency	>90% at 100% output power for 48VDC systems
Regulation	+/- 1% or better over line, load and temperature
Noise	<1mV RMS Psophometrically weighted <32dBmC Voiceband <10mV RMS and <100mV peak-to-peak (10kHz-100MHz)

### Protection:

Short Circuit	Can sustain short circuit at output terminals indefinitely
Reverse Battery Polarity	Internal fuse at output of RECTIFIER
High Voltage Shutdown	Rectifier shuts down if output exceeds programmed overvoltage limit
Electrostatic Discharge (ESD)	IEC 61000-4-2 (Level 4: Air 15kV, Contact 8kV)
Regulation	+/- 1% or better over line, load and temperature
AC Surge	IEC 61000-4-4 (EFT), Level 4 IEC 61000-4-5 (Impulse), Level X: 6kV/3kA IEC 61000-4-12 (Ringwave), Level X: 6kV/500A
RF Immunity	IEC 61000-4-3 (Radiated), Level 4 IEC 61000-4-6 (Conducted), Level 3
RF Emissions	CISPR 22 Class B, (Conducted & Radiated)

### Environmental:

Operating	-40°F (-40°C) to +158°F (+70°C)
Full Power	-40°F (-40°C) to +131°F (+55°C)
Derated Operation	50% power at +149°F (+65°C)
Storage/Transport	-40°F (-40°C) to +158°F (+70°C)
Humidity	0 to 100% relative humidity, condensing
Acoustic Noise	< 60dB (A weighting)

### Mechanical Dimensions: Note see drawings

### Agency Compliances:

Safety	Designed to IEC 60950, UL/CSA 60950
EMC	ETSI EN 300 386 V1.3.2 (2002-12)
Environmental	ETSI EN 300 019

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