

# SAGEON II® SERIES POWER MODULE DISTRIBUTION 48VDC | 200 to 600A

10-1029

## For telecommunications 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

#### Wide input Voltage range

useful service life

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.

The Sageon®II PM Distribution systems is another member of the Sageon Family, this distribution coupled with a Sageon®II Power Module gives you flexibility in mid range DC Power. The system capability ranges from 200A, 400A to 600A with a 20 breaker or 40 breaker distribution selections. As a member of the Sageon family, it has all the capabilities and performance of the Sageon controller functions and accessories.

The Sageon®II system comes ready to mount in a mid-mount configuration for installation into standard 19" or 23" relay racks. Flush mount options are available for use with our welded/tiered assemblies – 110.7010.00 & 110.7020.00 (see table D).

## THREE YEAR WARRANTY



## **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 59.2V					
Current limit	55A per 48V rectifier module, fully adjustable					
Power limit	2400W per rectifier module					
Efficiency >90% at 50 to 100% output power for 48VDC systems						
Regulation ±1% or better over line, load and temperature						
Noise	<1mV RMS Psophometrically weighted <32dBrnC 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)

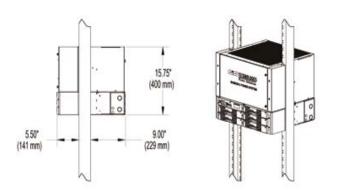
## **ENVIRONMENTAL:**

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)					

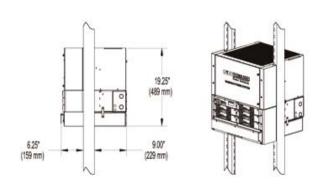
## AGENCY COMPLIANCES:

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

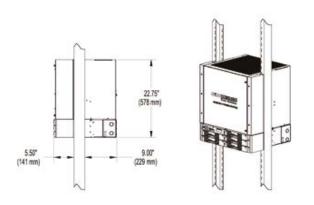




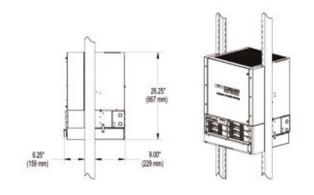
LIST 24-9RU 61 LBS.



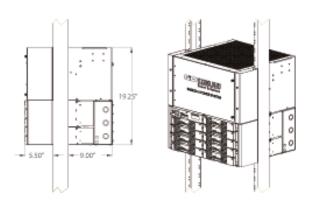
LIST 25-11RU 81 LBS.



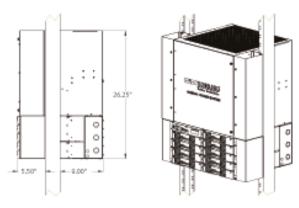
LIST 26-13RU 81 LBS.



LIST 27-15RU 101 LBS.

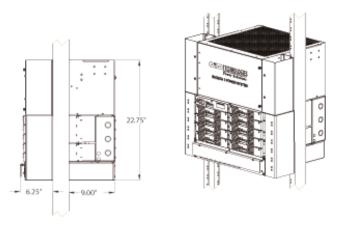


LIST 44-11RU 81 LBS.

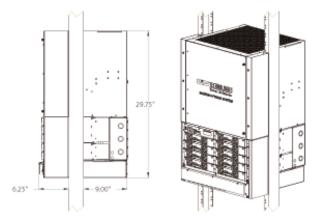


LIST 46-15RU 101 LBS.

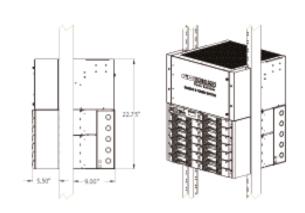




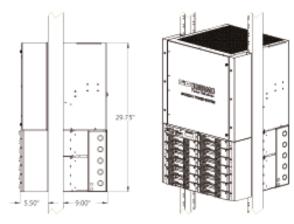
LIST 45-13RU 101 LBS.



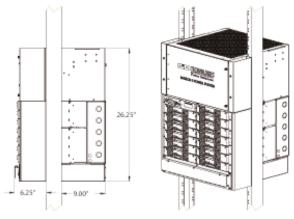
LIST 47-15RU 101 LBS.



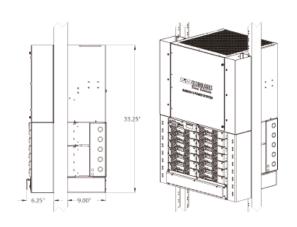
LIST 64-13RU 86 LBS.



LIST 66-17RU 106 LBS.



LIST 65-15RU 106 LBS.



LIST 67-19RU 126 LBS.



	OPTIO	ON ORDERIN	G											
			- 24	. 25	. 26	- 27	- 44	- 45	- 46	- 47	-64	- 65	99.	. 67
	EQUIPMENT DESCRIPTION	PART NUMBER	LIST	LIST	LIST	LIST	LIST	LIST	LIST	LIST	LIST	LIST	LIST	LIST
	RACK MOUNTING	PART NOMBER												
AMPERAGE RATING	19" RACK MID MOUNT (ADD AN "F" TO THE PART NUMBI	ER FOR FLUSH M	TNUC	ING*)										
200A	SAGEON2.L24	385.5202.2419	Х											$oxed{oxed}$
200A	SAGEON2.L25	385.5202.2519		Х										Ь.
200A	SAGEON2.L26	385.5202.2619			X									<u> </u>
400A	SAGEON2.L27 SAGEON2.L44	385.5202.2719				X	_			-				₩
400A 400A	SAGEON2.L44  SAGEON2.L45	385.5202.4419 385.5202.4519					X	X						-
400A	SAGEON2.L46	385.5202.4619							X					<u> </u>
400A	SAGEON2.L47	385.5202.4719								X				
600A	SAGEON2.L64	385.5202.6419									Х			
600A	SAGEON2.L65	385.5202.6519										Х		
600A	SAGEON2.L66	385.5202.6619											Х	
600A	SAGEON2.L67	385.5202.6719												X
	RACK MOUNTING	ED EOD ELLICIAN	OLINIT	INIC*\										
200A	23" RACK MID MOUNT (ADD AN "F" TO THE PART NUMB SAGEON2.L24	385.5202.2423	X	ING*)	T	1	1	T	1	1	1	ſ	T	
200A 200A	SAGEON2.L24 SAGEON2.L25	385.5202.2423		X										$\vdash$
200A 200A	SAGEON2.L26	385.5202.2623			Х									$\vdash$
400A	SAGEON2.L27	385.5202.2723				X				1				
400A	SAGEON2.L44	385.5202.4423			<u> </u>	<u> </u>	X	<u> </u>		ļ				
400A	SAGEON2.L45	385.5202.4523						Х						
400A	SAGEON2.L46	385.5202.4623							Х					
400A	SAGEON2.L47	385.5202.4723								Х				
600A	SAGEON2.L64	385.5202.6423									Х			
600A	SAGEON2.L65	385.5202.6523										Х		
600A	SAGEON2.L66	385.5202.6623											Х	
600A	SAGEON2.L67	385.5202.6723												Χ
RECTIFIERS	(0) (0) (0) (0) (0) (0) (0)	100 5555 (050	1	1	1 ,,	1 1/	1 1/	1 ,,		1 ,,			1 7	T
	48V 2400W @ 208-240VAC BLANK COVERS	100.7675.4850	X	X	X	X	X	X	X	X	X	X	X	X
50 AMPS CL	Y CURRENT TRANSDUCER INTERFACE BOARD  OSED WINDOW (EXTERNAL) WITH 4 FEET CABLE	385.5202.17 385.5971.050	X	X	X	X								
	OSED WINDOW (EXTERNAL) WITH 4 FEET CABLE	385.5972.050	X	X	X	X	-			-	-			$\vdash$
	LOSED WINDOW (EXTERNAL) WITH 4 FEET CABLE SPLIT WINDOW (EXTERNAL) WITH 4 FEET CABLE	385.5971.100 385.5972.100	X	X	X	X	<u> </u>				-			├
	LOSED WINDOW (EXTERNAL) WITH 4 FEET CABLE	385.5971.200	X	X	X	X	X	X	X	X	X	Х	X	X
	SPLIT WINDOW (EXTERNAL) WITH 4 FEET CABLE	385.5972.200	X	X	X	X	X	X	X	X	X	X	X	X
	00 AMPS CLOSED WINDOW (EXTERNAL)	385.5971.400					Х	Х	Х	Х	Х	Х	Х	Х
4	400 AMPS SPLIT WINDOW (EXTERNAL)	385.5972.400					Х	Х	Х	Х	Х	Х	Х	Х
60	00 AMPS CLOSED WINDOW (EXTERNAL)	385.5971.600					Х	Х	Х	Х	Х	Х	Х	Х
8	300 AMPS SPLIT WINDOW (EXTERNAL)	385.5972.800					Х	Χ	Х	Х	Х	Χ	Χ	Х
LOW VOLTAGE BAT	TERY DISCONNECT (LVBD)													
200	AMP CONTACTOR AND BYPASS SWITCH	385.5202.13	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	600 AMP CONTACTOR	385.5202.11					Х	Х	Х	Х	Х	Х	Χ	Χ
COMMUNICATIONS		T				1	1							
	ETHERNET TCP/IP	385.4014.25	X	X	X	X	X	X	X	X	X	X	X	X
TEMPERATURE SEN	ETHERNET TCP/IP/SNMP	385.4015.25	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х
	NSORS 4 BATTERY SENSORS PER SENSOR INTERFACE BOARD FO	OR LISTS L24-L27,	L44-L4	47, & Li	64-L67	7								
	E BATTERY TEMP SENSOR INTERFACE BOARD	385.5202.18	X	X	X	Х								П
	10' (3m) CABLE LENGTH	385.5941.03	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	20' (6m) CABLE LENGTH	385.5941.06	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	50' (15m) CABLE LENGTH	385.5941.15	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	100' (30m) CABLE LENGTH	385.5941.30	Χ	Χ	Χ	Х	Х	Χ	Х	Χ	Х	Χ	Χ	Х
BATTERY CELL MOI		T	<del></del>	T	1	T	T	1	<del></del>	T	T	·	T	
	DR (REQUIRES BOTH BATTERY WIRE & POST ADAPTOR) IRE SUPPORTS UP TO 24 CELLS	385.5202.20	Χ	Χ	X	Х	Х	X	Х	Х	X	Χ	X	Х
DATE OF THE STATE OF	BATTERY SENSE LENGTH 10'	350.7812.10	X	Х	Х	Х	Х	Х	X	X	Х	Х	Х	X
	BATTERY SENSE LENGTH 25'	350.7812.25	X	X	X	X	X	X	X	X	X	X	X	X
	BATTERY SENSE LENGTH 50'	350.7812.50	Х	Х	Х	Х	Х	Х	X	Х	X	Х	Х	Х
	BATTERY SENSE LENGTH 100'	350.7812.100	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
BATTERY POST LUC	SIZE SUPPORTS UP TO 24 CELLS													
	BATTERY POST ADAPTOR KIT #10	385.6151.03	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	BATTERY POST ADAPTOR KIT 1/4" (6mm)	385.6151.04	Х	Χ	Х	Χ	Χ	Х	Χ	Х	Х	Х	Χ	Х
BATTERY POST ADAPTOR KIT 5/16" (8mm)		385.6151.05	X	Х	Х	Х	Х	Х	Х	Х	X	Х	X	X
	ATTERY POST ADAPTOR KIT 3/8 (10mm)	385.6151.06	X	X	X	X	X	X	X	X	X	X	X	X
	ATTERY POST ADAPTOR KIT 1/2" (12mm)	385.6151.07	X	X	X	X	X	X	X	X	X	Х	X	X
SITE MONITORING	SITE MONITOD (EVTEDNIAL DANIEL)	385.5202.21	X	X	X	X	X	X	X	X	X	Х	X	X
	SITE MONITOR (EXTERNAL PANEL)			_			_	_		_ ^		^_	^	^

<sup>\*</sup> FLUSH MOUNTING IS ONLY TO BE USED ON WELDED/TIERED RACK ASSEMBLIES. MID-MOUNT MUST BE USED ON STANDARD RELAY RACKS. NO MOUNTING KIT REQUIRED FOR 19" FLUSH MOUNT.

© 2019 UNIPOWER LLC

This document is believed to be correct at time of publication and UNIPOWER LLC accepts no responsibility for consequences from printing errors or inaccuracies. All specifications subject to change without notice.