



SREGS-P3-4000U-02

4000 Watt Power Management Unit

Typical Applications:

- Unmanned Air Vehicles (UAV's) and Unmanned Ground Vehicles (UGV's)
- Remote Power Generation
- Power Regulation from Alternative sources, ex. wind or solar

Featuring:

- 3 Phase AC primary input, 15 - 85 VACrms.
- Three simultaneous output voltages, 24 - 32 VDC 135 Amps, 12 - 15 VDC 13 Amps, and 5 - 7 VDC 7 Amps
- MIL-SPEC circular connectors
- Operates up to 94% peak efficiency
- Lightweight aluminum enclosure with active thermal management

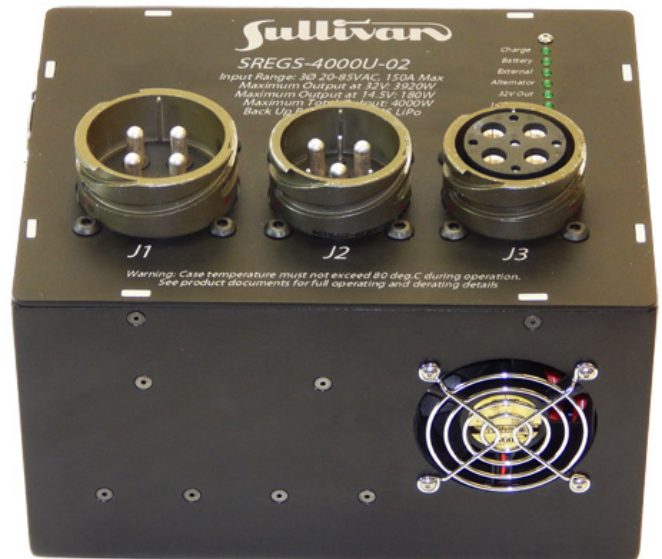
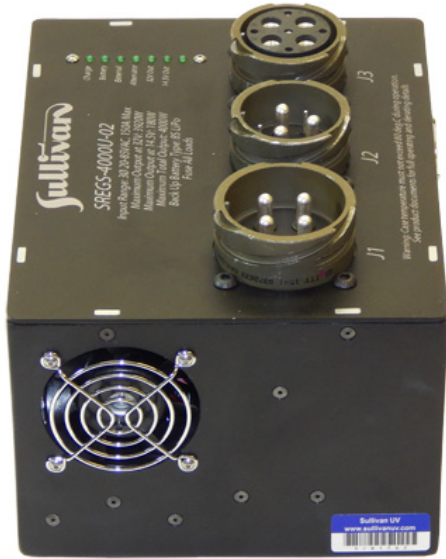


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Specifications



Output:	Conditions	Min	Max	Input:	Conditions	Min	Max
Main Output:	135A/3800W Max	24 VDC*	32 VDC*	Alternator Input Voltage:	3Ø, 0 - 1 KHz	15 VAC	85 VAC
Secondary Output:	13A/150W Max	12 VDC*	15 VDC*	Backup Battery:		24 VDC	32 VDC
Tertiary Output:	7A/42W Max	5 VDC*	7 VDC*	External Shore Power:	DC	24 VDC	32 VDC
Maximum Total Power:			4000 Watts	Battery Switch Time:	N/A		
Peak Efficiency:			94%	Mechanical: Conditions			
Self Protection:	Overvoltage, Undervoltage, Overcurrent, Reverse EMF			Enclosure Material:	Black Anodized Aluminum		
Maximum Overload Current:	Up to 10mS duration		125%	Dimensions:	210 mm x 165 mm x 130 mm		
Output Ripple, Maximum:	p-p All Outputs		500mV	Weight:	3475g		
Voltage Regulation:	All outputs		+/-500mV	Connectors:	MIL-SPEC Circular Connectors		
Status Signal:	5V High Impedance			Design Standard:	MIL-STD 1275D		
Battery Charger Type:	Basic, Cell monitoring, or Full balance charging options available			Conformal Coating:	MIL-I-46058C Type UR		
Back-up Battery Charging:	LiPO, Lilon, LifePO4, NiCad, NiMH, SLA, Lead Acid*		900mA	Cooling:	25 and 18 CFM Fans, may be replaced by forced air		
				Operating Temperature:	-20C to 55C		
				Storage Temperature:	-40C to 85C		

*Factory Adjustable

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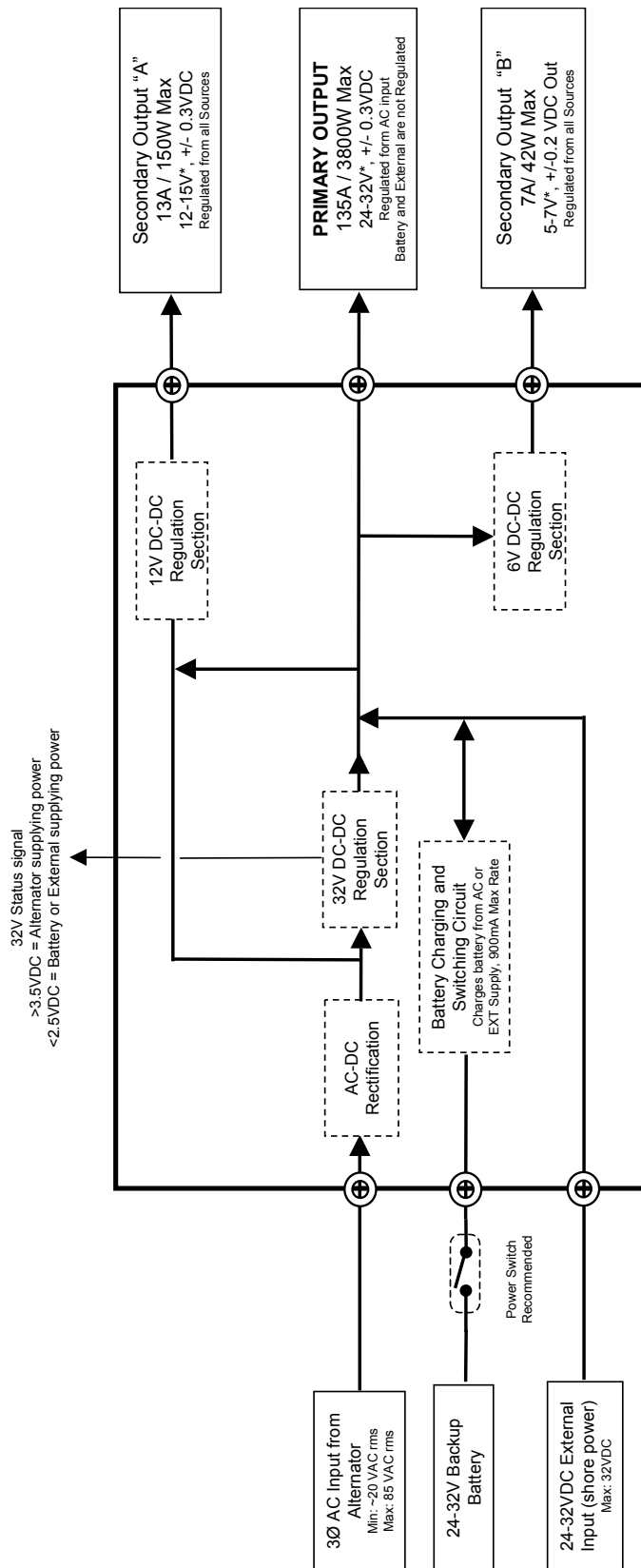
4000 Watt Power Management Unit



8950 Yellow Brick Rd
Baltimore MD 21237
(410) 732-3500
www.sullivanuv.com

SULLIVAN UV SREGS-P3-4000-02 PMU Block Diagram

Created: July 9, 2015
Revised: Dec. 15, 2015



*Output voltages are factory adjustable within the range specified. Other voltage options may be available, enquire with engineering

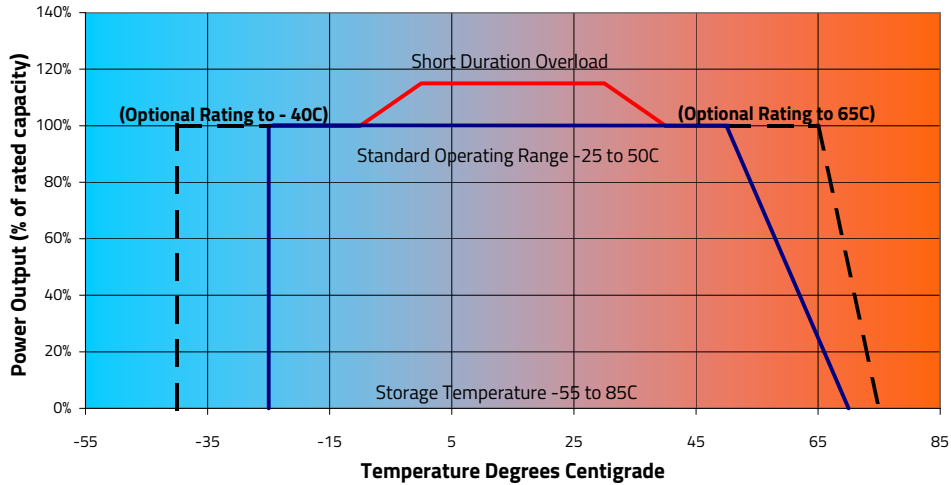
General Notes:

- Customer responsible for fusing all loads
- Battery recharges from External Input or AC input
- Enclosure type: Welded Aluminum, Black Anodize
- All connections are Circular Connectors: MIL-DTL-5015 type, arrangements 28-10, 28-22 and 32-17
- All outputs are filtered to 100Mhz to 1 Ghz and include protection against Reverse Polarity and Transients

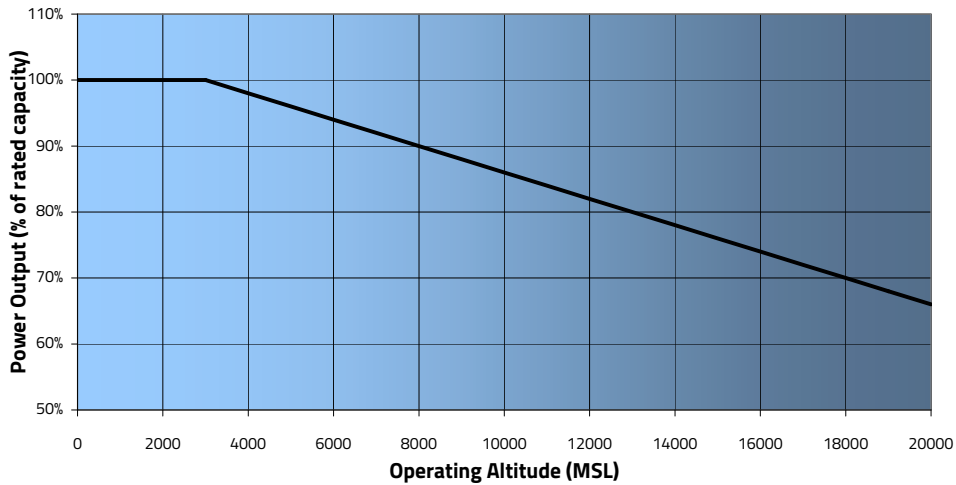
For engineering use only.
For further information contact:
Sullivan Products
(410) 732-3500
www.sullivanuv.com

Performance

Allowable Storage and Operating Temperature Profile

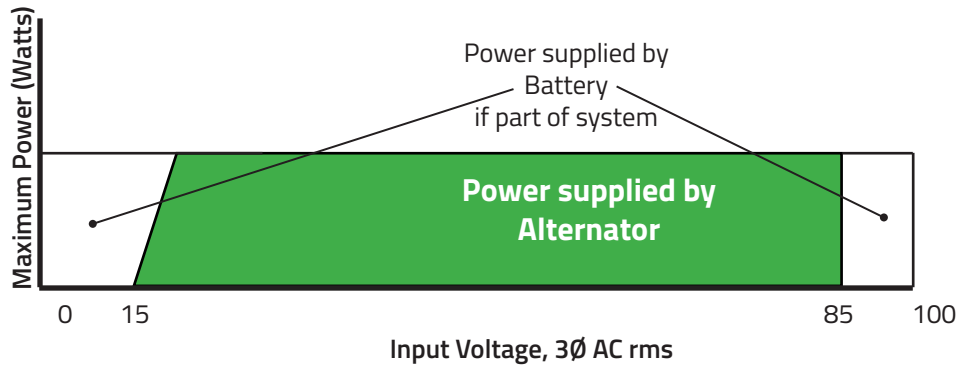


Power Derating due to Altitude



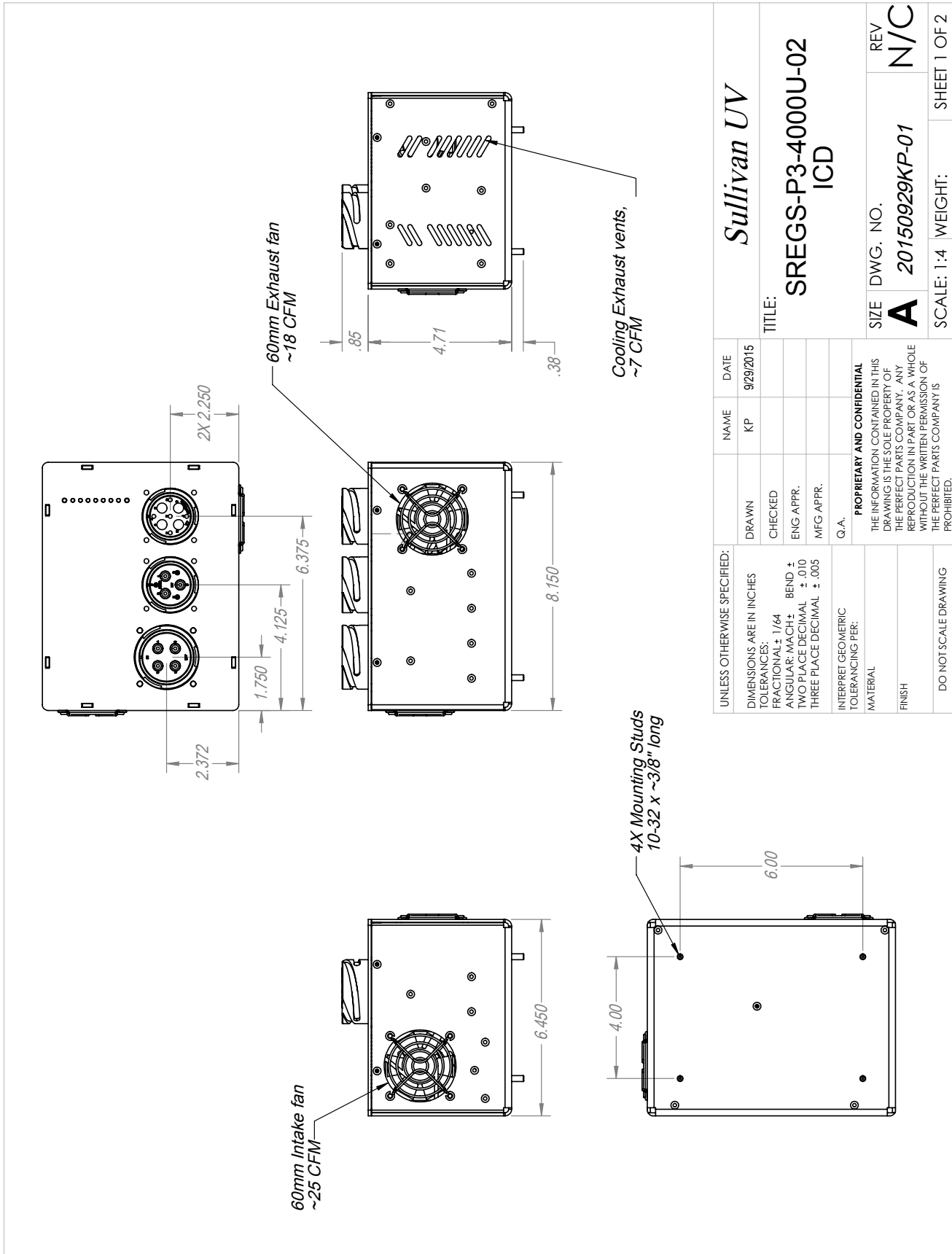
Alternator Input Range

28V Primary Output



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UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES		KP	9/29/2015
TOLERANCES:			
FRACTIONAL: ± 1/64			
ANGULAR: MACH ±			
TWO PLACE DECIMAL ± .010			
THREE PLACE DECIMAL ± .005			
INTERPRET GEOMETRIC TOLERANCING PER:			
MATERIAL			
FINISH			
DO NOT SCALE DRAWING			
PROPRIETARY AND CONFIDENTIAL			
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF THE PERFECT PARTS COMPANY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF THE PERFECT PARTS COMPANY IS PROHIBITED.			

Sullivan UV	
TITLE: SREGS-P3-4000U-02 ICD	
SIZE	DWG. NO.
A	20150929KP-01
REV	N/C
SCALE: 1:4	WEIGHT:
	SHEET 1 OF 2

1
2
3
4
5

SREGS-P3-4000U-02

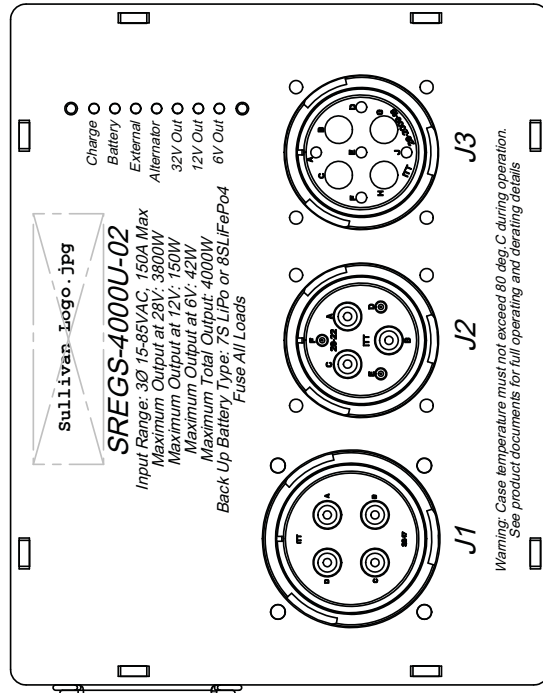
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Connector J1: DC Input Power
 ITT CANNON MIL-C-5015 CA-Bayonet
 P/N: CA3102E32-17PB109
 Mates with: CA3106E32-17SBF80
 Pin A: External DC Input (+)
 Pin B: External DC Input (-)
 Pin C: Back Up Battery (+)
 Pin D: Back Up Battery (-)
 4 gage wires for all

Connector J2: AC Input
 ITT CANNON MIL-C-5015 CA-Bayonet
 P/N: CA3102E28-22PB109
 Mates with: CA3106E28-22SBF80
 Pin A: Alternator Phase U (-), 4 gage
 Pin B: Alternator Phase V (-), 4 gage
 Pin C: Alternator Phase W (-), 4 gage
 Pin D-F: Unused
 *** Note: Phase order does not matter for All. Input ***

Connector J3: DC Output and Signals
 ITT CANNON MIL-C-5015 CA-Bayonet
 P/N: CA3102E28A-16SB109
 Mates with: CA3106E28A-16PBF80
 Pin A: Input Status Signal (+), 16g max, 22g min.
 Pin B: 12V Secondary Output (-) 4g max, 14g min
 Pin C: 12V Secondary Output (+) 4g max, 14g min
 Pin D: Input Status Signal (-), 16g max, 22g min
 Pin E: Unused
 Pin F: 6V Secondary Output (+) 16 gage
 Pin G: 28V Primary Output (+) 4 gage
 Pin H: 28V Primary Output (-) 4 gage
 Pin J: 6V Secondary Output (-) 16 gage



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TOLERANCES: FRACTIONAL ± 1/64 ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± .010 THREE PLACE DECIMAL ± .005	CHECKED		
INTERPRET GEOMETRIC TOLERANCING PER:	ENG APPR.		
MATERIAL	MFG APPR.		
FINISH	Q.A.		
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TITLE:
SREGS-P3-4000U-02
ICD

SIZE	DWG. NO.	REV
A	20150929KP-01	N/C
SCALE: 1:4	WEIGHT:	SHEET 2 OF 2