



- Chassis & Eurocard Mounting
- RIA 12/13 Input Option
- UL Approved
- Internal Redundancy Diodes Available
- Non-Standard Configurations Available
- Current Share & Monitor Signals

Specification

Input		Temperature Coefficient	<ul style="list-style-type: none"> • 0.02%/°C single output models & main output of multi output models • 0.04%/°C on aux. outputs
Input Voltage	<ul style="list-style-type: none"> • See Table 	Remote Sense	<ul style="list-style-type: none"> • Fitted to single output models both positive & negative line, fitted to multi output units only positive line • Compensates for 0.5 V cable drop (Not available when operating in parallel)
Inrush Current	<ul style="list-style-type: none"> • See Table 	Remote ON/OFF	<ul style="list-style-type: none"> • See Signals Table ⁽¹⁾
RIA Input	<ul style="list-style-type: none"> • 110 V nominal, 77-250 VDC range • 385 VDC - 20 ms surge • 1800 VDC - 50 μs fast transients • 66 VDC - 100 ms droop (200 & 300 W models only) 	Current Share	<ul style="list-style-type: none"> • See Signals Table ⁽¹⁾
Reverse Polarity Protection	<ul style="list-style-type: none"> • Standard on all inputs except 12 VDC 	General	
Output		Efficiency	<ul style="list-style-type: none"> • 80-95%, consult office for each model
Output Voltage	<ul style="list-style-type: none"> • See Tables 	Isolation	<ul style="list-style-type: none"> • 6000 VDC Input to Output (Y caps disconnected) • 2200 VDC Input to Ground • 2200 VDC Output to Chassis
Output Voltage Adj.	<ul style="list-style-type: none"> • See Tables 	Switching Frequency	<ul style="list-style-type: none"> • 30 kHz typical
Minimum Load	<ul style="list-style-type: none"> • 10% on V1 of multi output models & when operating single output models in parallel 	AC OK	<ul style="list-style-type: none"> • See Signals Table ⁽¹⁾
Hold Up Time	<ul style="list-style-type: none"> • 12-28 ms dependant on model 	DC OK	<ul style="list-style-type: none"> • See Signals Table ⁽¹⁾
Line Regulation	<ul style="list-style-type: none"> • <0.5% single output & V1 of multi output units, <1% aux outputs • V min to V max 	Indicators	<ul style="list-style-type: none"> • See Signals Table ⁽¹⁾
Load Regulation	<ul style="list-style-type: none"> • <1.0% single output models for 0-100% load change, <2.0% multi output models on V3, V4 & V5, <4.0% for V2 for 20-80% load change 	MTBF	<ul style="list-style-type: none"> • Typically >110,000 hrs at 20 °C to MIL-HDBE-217E, consult sales for individual models
Ripple & Noise	<ul style="list-style-type: none"> • See Tables, measured at 20 MHz BW 	Environmental	
Overload Protection	<ul style="list-style-type: none"> • Single output models, constant current at approx 110% I nom. • Multi output models, V1, V4 & V5 approx 3xInom for 10 s then foldback, V2 & V3 1500 A²s by Polyswitch™ 	For all Environmental	<ul style="list-style-type: none"> • See AC-DC SX Series Datasheet
Overvoltage Protection	<ul style="list-style-type: none"> • See Table 	EMC & Safety	
Short Circuit Protection	<ul style="list-style-type: none"> • Constant current 	For all EMC & Safety	<ul style="list-style-type: none"> • See AC-DC SX Series Datasheet
		Note:	
		1. See SX Series AC-DC datasheet	

Model Numbering - Standard Unit

Style	Power (watts)	Inputs	No. of Outputs	Outputs	Options
<p>SA = Chassis Mount (Ears)</p> <p>SN = Narrow</p> <p>SX = Chassis Mount</p> <p>SB = Box</p> <p>SC = 3U Cassette</p> <p>SE = 6U Eurorack</p>	<p>200</p> <p>300</p> <p>350</p> <p>550</p> <p>750</p> <p>1k1</p>	<p>12 = 12 VDC</p> <p>24 = 24 VDC</p> <p>35 = 35 VDC</p> <p>48 = 48 VDC</p> <p>60 = 60 VDC</p> <p>C = 110 VDC</p> <p>D2 = 220 VDC</p> <p>E3 = 300 VDC⁽³⁾</p> <p>P = Universal</p> <p>T = 550 VDC⁽³⁾</p>	<p>S = Single</p> <p>M = Multi⁽⁵⁾</p>	<p>Single O/Ps</p> <p>02 = 2 V</p> <p>03 = 3.3 V</p> <p>05 = 5 V</p> <p>08 = 8 V</p> <p>12 = 12 V</p> <p>15 = 15 V</p> <p>24 = 24 V</p> <p>36 = 36 V</p> <p>48 = 48 V</p> <p>60 = 60 V</p> <p>C1 = 100 V</p> <p>C3 = 130 V</p> <p>C7 = 170 V</p> <p>D2 = 220 V</p> <p>E3 = 300 V</p>	<p>-C = Cover</p> <p>-B = Signals (Batt)</p> <p>-S = Signals (TTL)</p> <p>-R = Signals (Relay)</p> <p>-T = OTP</p> <p>-N = Temp Comp</p> <p>-D = 'OR'diode</p> <p>-E = Tropicalisation</p> <p>-F = Relay I/P & O/P</p> <p>-M = Ruggedised</p>
<p>EXAMPLE: SX 350 48 S 24 - C</p> <p>X=Open Frame</p> <p>350 = Power Output</p> <p>48 = Nominal 48 VDC input</p>		<p>C = Safety Cover Fitted</p> <p>24 = Output 24 VDC</p> <p>S = Single Output</p>			

Model Numbering - RIA12 Input Unit

Style	Power (watts)	Inputs	No. of Outputs	Outputs	Options
<p>SRA = Chassis Mount (Ears)</p> <p>SRN = Narrow</p> <p>SRX = Chassis Mount</p> <p>SRB = Box</p> <p>SRC = 3U Cassette</p> <p>SRE = 6U Eurorack</p>	<p>200</p> <p>300</p>	<p>24 = 24 VDC</p> <p>35 = 36 VDC</p> <p>48 = 48 VDC</p> <p>72 = 72 VDC</p> <p>95 = 96 VDC</p> <p>C = 110 VDC</p>	<p>S = Single</p> <p>M = Multi⁽⁵⁾</p>	<p>Single O/Ps</p> <p>02 = 2 V</p> <p>03 = 3.3 V</p> <p>05 = 5 V</p> <p>08 = 8 V</p> <p>12 = 12 V</p> <p>15 = 15 V</p> <p>24 = 24 V</p> <p>36 = 36 V</p> <p>48 = 48 V</p> <p>60 = 60 V</p> <p>C1 = 100 V</p> <p>C3 = 130 V</p> <p>C7 = 170 V</p> <p>D2 = 220 V</p> <p>E3 = 300 V</p>	<p>-C = Cover</p> <p>-B = Signals (Batt)</p> <p>-S = Signals (TTL)</p> <p>-R = Signals (Relay)</p> <p>-T = OTP</p> <p>-N = Temp Comp</p> <p>-D = 'OR'diode</p> <p>-E = Tropicalisation</p> <p>-F = Relay I/P & O/P</p> <p>-M = Ruggedised</p>
<p>EXAMPLE: SRX 200 C S 12 - C</p> <p>SRX= RIA Input Open Frame</p> <p>200 = Power Output</p> <p>R = 110 VDC Input</p>		<p>C = Safety Cover Fitted</p> <p>12 = Output 12 VDC</p> <p>S = Single Output</p>			

INPUT SPECIFICATION - STANDARD UNIT

Nominal Input Voltage	Input Voltage Range ⁽¹⁾	Full Load Input Current						Inrush Current						Code
		200	300	350	550	750	1k1	200	300	350	550	750	1k1	
12 VDC	11-15 V	23 A	34 A	40 A	63 A	-	-	100 A	100 A	200 A	200 A	-	-	12
24 VDC	21-30 V	11 A	16 A	19 A	30 A	-	-	100 A	100 A	200 A	200 A	-	-	24
35 VDC	30-45 V	8 A	11 A	13 A	20 A	-	-	30 A	30 A	50 A	50 A	-	-	35
48 VDC	40-60 V	5 A	9 A	9 A	14 A	19 A	-	30 A	30 A	50 A	50 A	50 A	-	48
60 VDC	48-75 V	4 A	6 A	7 A	11 A	15 A	-	30 A	30 A	50 A	50 A	50 A	-	60
110 VDC	90-135 V	3 A	4 A	5 A	7 A	10 A	13.0 A	30 A	30 A	50 A	50 A	50 A	50 A	C
220 VDC	180-270 V	1 A	2 A	2 A	3 A	5 A	6.0 A	25 A	25 A	25 A	25 A	25 A	25 A	D2
300 VDC	250-370 V ⁽³⁾	1 A	1 A	1 A	2 A	3 A	4.5 A	25 A	25 A	25 A	25 A	25 A	25 A	E3
Universal	125-360 V	2 A	3 A	4 A	6 A	8 A	-	25 A	25 A	25 A	25 A	25 A	-	P
550 VDC	425-635 V ⁽³⁾	1 A	1 A	1 A	2 A	2 A	2.5 A	40 A	40 A	40 A	40 A	40 A	40 A	T

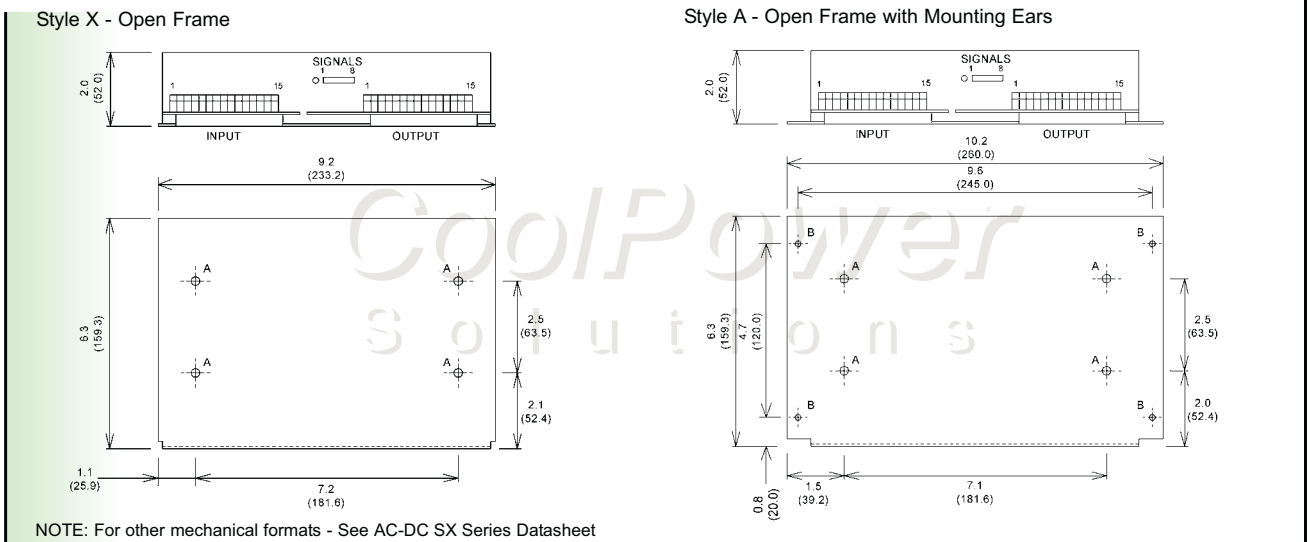
Notes

- Other non-standard inputs and outputs available, contact sales for details.
- For options, application notes and mechanical details - See SX Series AC-DC Datasheet.
- Not UL approved
- RIA input units not UL approved.
- Multi outputs available, contact Sales.

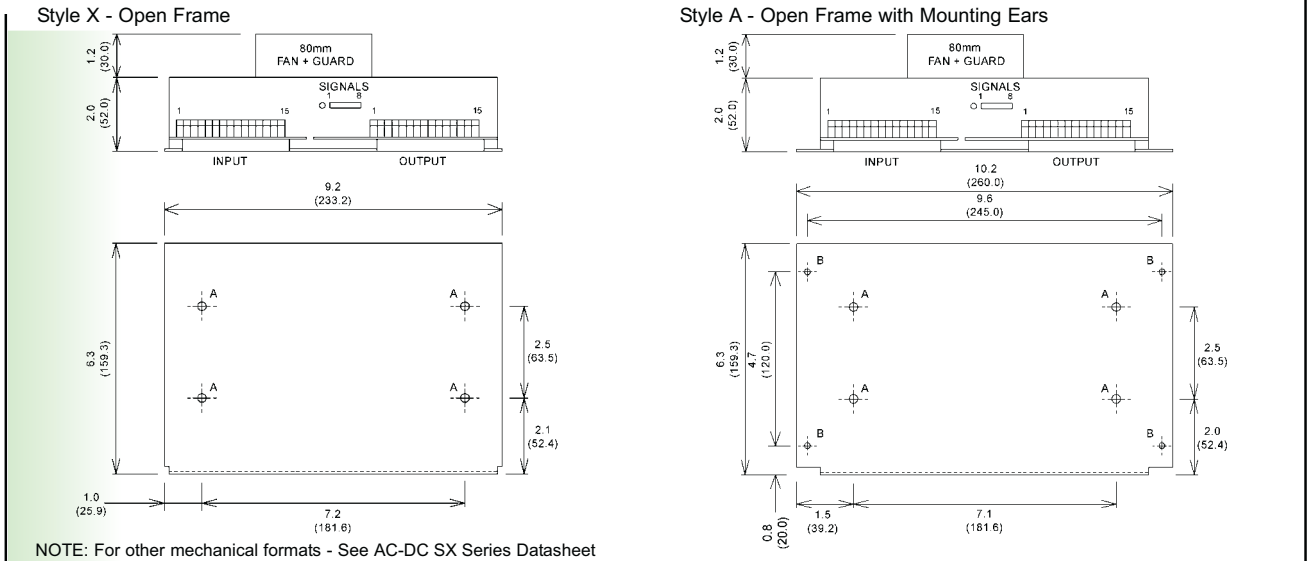
OUTPUT VOLTAGE & CURRENT RATINGS - 200 WATT MODELS														SX		
Code	S02	S03	S05	S08	S12	S15	S24	S36	S48	S60	SC1	SC3	SC7	SD2	SE3	
Nom Output Voltage	2 V	3.3 V	5 V	8 V	12 V	15 V	24 V	36 V	48 V	60 V	96 V	130 V	170 V	220 V	300 V	
Voltage Adj	Min	1.6 V	2.6 V	4.0 V	7.0 V	11.0 V	13.8 V	22.0 V	33.0 V	44.0 V	55.0 V	88.0 V	120.0 V	155.0 V	200.0 V	250.0 V
	Max	2.4 V	4.0 V	6.0 V	9.0 V	14.0 V	17.5 V	29.0 V	42.0 V	57.0 V	70.0 V	114.0 V	155.0 V	202.0 V	260.0 V	360.0 V
OVP Setting (typ)	2.5 V	4.2 V	6.4 V	10.2 V	15.3 V	19.1 V	30.7 V	45.9 V	61.2 V	76.5 V	127.5 V	166.5 V	217.5 V	281.5 V	383.5 V	
Output Current	62.0 A	47.0 A	36.0 A	24.0 A	17.0 A	14.0 A	8.4 A	5.6 A	4.2 A	3.3 A	2.1 A	1.6 A	1.2 A	1.0 A	0.7 A	
Ripple & Noise	<0.2% rms, <2% pk-pk				<0.1% rms, <1% pk-pk				<0.05% rms, <0.5% pk-pk							

OUTPUT VOLTAGE & CURRENT RATINGS - 300 WATT MODELS														SX		
Code	S02	S03	S05	S08	S12	S15	S24	S36	S48	S60	SC1	SC3	SC7	SD2	SE3	
Nom Output Voltage	2 V	3.3 V	5 V	8 V	12 V	15 V	24 V	36 V	48 V	60 V	96 V	130 V	170 V	220 V	300 V	
Voltage Adj	Min	1.6 V	2.6 V	4.0 V	7.0 V	11.0 V	13.8 V	22.0 V	33.0 V	44.0 V	55.0 V	88.0 V	120.0 V	155.0 V	200.0 V	250.0 V
	Max	2.4 V	4.0 V	6.0 V	9.0 V	14.0 V	17.5 V	29.0 V	42.0 V	57.0 V	70.0 V	114.0 V	155.0 V	202.0 V	260.0 V	360.0 V
OVP Setting (typ)	2.5 V	4.2 V	6.4 V	10.2 V	15.3 V	19.1 V	30.7 V	45.9 V	61.2 V	76.5 V	127.5 V	166.5 V	217.5 V	281.5 V	383.5 V	
Output Current	92.0 A	70.0 A	53.0 A	36.0 A	25.0 A	20.0 A	12.5 A	8.3 A	6.3 A	5.0 A	3.0 A	2.3 A	1.8 A	1.4 A	1.1 A	
Ripple & Noise	<0.2% rms, <2% pk-pk				<0.1% rms, <1% pk-pk				<0.05% rms, <0.5% pk-pk							

Mechanical Details - 200 Watt Models



Mechanical Details - 300 Watt Models



OUTPUT VOLTAGE & CURRENT RATINGS - 350 WATT MODELS														SX		
Code	S02	S03	S05	S08	S12	S15	S24	S36	S48	S60	SC1	SC3	SC7	SD2	SE3	
Nom Output Voltage	2 V	3.3 V	5 V	8 V	12 V	15 V	24 V	36 V	48 V	60 V	96 V	130 V	170 V	220 V	300 V	
Voltage Adj	Min	1.6 V	2.6 V	4.0 V	7.0 V	11.0 V	13.8 V	22.0 V	33.0 V	44.0 V	55.0 V	88.0 V	120.0 V	155.0 V	200.0 V	250.0 V
	Max	2.4 V	4.0 V	6.0 V	9.0 V	14.0 V	17.5 V	29.0 V	42.0 V	57.0 V	70.0 V	114.0 V	155.0 V	202.0 V	260.0 V	360.0 V
OVP Setting (typ)	2.5 V	4.2 V	6.4 V	10.2 V	15.3 V	19.1 V	30.7 V	45.9 V	61.2 V	76.5 V	127.5 V	166.5 V	217.5 V	281.5 V	383.5 V	
Output Current	108.0 A	82.0 A	62.0 A	42.0 A	29.0 A	23.0 A	15.0 A	10.0 A	7.3 A	5.8 A	3.5 A	2.7 A	2.1 A	1.6 A	1.2 A	
Ripple & Noise	<0.2% rms, <2% pk-pk				<0.1% rms, <1% pk-pk				<0.05% rms, <0.5% pk-pk							

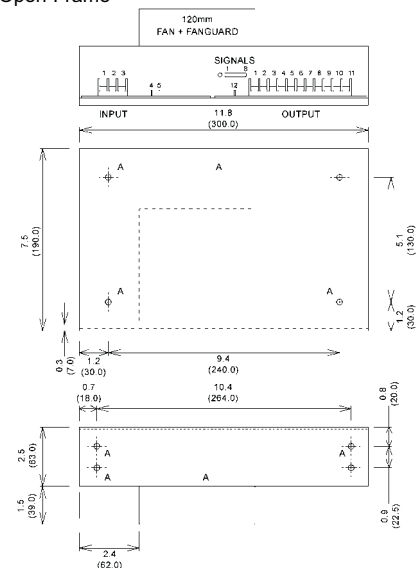
OUTPUT VOLTAGE & CURRENT RATINGS - 550 WATT MODELS														SX		
Code	S02	S03	S05	S08	S12	S15	S24	S36	S48	S60	SC1	SC3	SC7	SD2	SE3	
Nom Output Voltage	2 V	3.3 V	5 V	8 V	12 V	15 V	24 V	36 V	48 V	60 V	96 V	130 V	170 V	220 V	300 V	
Voltage Adj	Min	1.6 V	2.6 V	4.0 V	7.0 V	11.0 V	13.8 V	22.0 V	33.0 V	44.0 V	55.0 V	88.0 V	120.0 V	155.0 V	200.0 V	250.0 V
	Max	2.4 V	4.0 V	6.0 V	9.0 V	14.0 V	17.5 V	29.0 V	42.0 V	57.0 V	70.0 V	114.0 V	155.0 V	202.0 V	260.0 V	360.0 V
OVP Setting (typ)	2.5 V	4.2 V	6.4 V	10.2 V	15.3 V	19.1 V	30.7 V	45.9 V	61.2 V	76.5 V	127.5 V	166.5 V	217.5 V	281.5 V	383.5 V	
Output Current	169.0 A	128.0 A	98.0 A	65.0 A	46.0 A	37.0 A	23.0 A	15.0 A	11.0 A	9.0 A	5.5 A	4.2 A	3.2 A	2.5 A	1.8 A	
Ripple & Noise	<0.2% rms, <2% pk-pk				<0.1% rms, <1% pk-pk				<0.05% rms, <0.5% pk-pk							

OUTPUT VOLTAGE & CURRENT RATINGS - 750 WATT MODELS														SX		
Code	S02	S03	S05	S08	S12	S15	S24	S36	S48	S60	SC1	SC3	SC7	SD2	SE3	
Nom Output Voltage	2 V	3.3 V	5 V	8 V	12 V	15 V	24 V	36 V	48 V	60 V	96 V	130 V	170 V	220 V	300 V	
Voltage Adj	Min	-	-	-	11.0 V	13.8 V	22.0 V	33.0 V	44.0 V	55.0 V	88.0 V	120.0 V	155.0 V	200.0 V	250.0 V	
	Max	-	-	-	14.0 V	17.5 V	29.0 V	42.0 V	57.0 V	70.0 V	114.0 V	155.0 V	202.0 V	260.0 V	360.0 V	
OVP Setting (typ)	-	-	-	-	15.3 V	19.1 V	30.7 V	45.9 V	61.2 V	76.5 V	127.5 V	166.5 V	217.5 V	281.5 V	383.5 V	
Output Current	-	-	-	-	63.0 A	50.0 A	31.0 A	21.0 A	16.0 A	12.5 A	7.5 A	5.8 A	4.4 A	3.4 A	2.5 A	
Ripple & Noise					<0.1% rms, <1% pk-pk				<0.05% rms, <0.5% pk-pk							

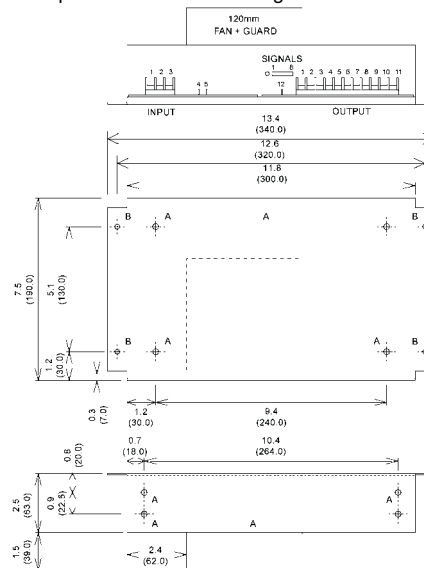
OUTPUT VOLTAGE & CURRENT RATINGS - 1k1 WATT MODELS														SX		
Code	S02	S03	S05	S08	S12	S15	S24	S36	S48	S60	SC1	SC3	SC7	SD2	SE3	
Nom Output Voltage	2 V	3.3 V	5 V	8 V	12 V	15 V	24 V	36 V	48 V	60 V	96 V	130 V	170 V	220 V	300 V	
Voltage Adj	Min	-	-	-	-	-	22.0 V	33.0 V	44.0 V	55.0 V	88.0 V	120.0 V	155.0 V	200.0 V	250.0 V	
	Max	-	-	-	-	-	29.0 V	42.0 V	57.0 V	70.0 V	114.0 V	155.0 V	202.0 V	260.0 V	360.0 V	
OVP Setting	-	-	-	-	-	-	30.7 V	45.9 V	61.2 V	76.5 V	127.5 V	166.5 V	217.5 V	281.5 V	383.5 V	
Output Current	-	-	-	-	-	-	46.0 A	31.0 A	23.0 A	18.0 A	11.0 A	8.5 A	6.5 A	5.0 A	3.7 A	
Ripple & Noise					<0.1% rms, <1% pk-pk				<0.05% rms, <0.5% pk-pk							

Mechanical Details - 350, 550, 750 & 1k1 Watt Models

Style X - Open Frame



Style A - Open Frame with Mounting Ears



NOTE: 350 Watt models do not have fan & fanguard.
For other mechanical formats - See AC-DC SX Series Datasheet