

SDX-350-G24 Series

350W 24VDC Input ATX Power Supply



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * High efficiency and reliability
- * Soft start function, low inrush current
- * Input reverse polarity protection
- * 3.3V & 5V VRM design
- * -5V output option
- * Over voltage, over load & short circuit protection
- * With power good signal & PS-ON signal output
- * 100% full load burn-in test
- * Meet Intel ATX 2.31
- * UL, cUL, CB, CE standard
- * 3 years warranty

Specification:

INPUT	Voltage	19V ~ 36V DC (Typical 24V)						
	Current	<20A @ 24V DC input,						
	Protection	Ceramic Fuse 30A/250V						
OUTPUT	Voltage	5V	3.3V	12V1	12V2	-5V	-12V	5Vsb
	Min Load	0A	0A	0.5A	0A	0A	0A	0A
	Max Load	20A	20A	16A	16A	0.5A	1A	2.5A
	Output Tolerance ②	±3%	±5%	±3%	±3%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	150mV	150mV	100mV	150mV	70mV
	Efficiency (TYP.)	82%						
	Output MAX.	Input Voltage : 19V ~ 23V total output max 280W ; Input Voltage : 23V ~ 36V total output max 350W 3.3V & 5V max 115W, -5V & -12V max 12W						
PROTECTION	Over Voltage	5.7V~6.5V	3.7V~4.1V	13.1V~14.5V		----	----	----
		Shutdown, it needs re-power on to recover						
	Over current (MAX)	25A	25A	20A	20A	----	----	----
	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and latch off, recover after re-start up.						
ELEC. CHAR.	Rise time	<20mS						
	Power good signal	Power ON within 100---500ms, high level TTL Signal release.						
ENVIRONMENT	Temperature ④	Operating: -20 ~ 70°C ; De-rating: 50 ~ 70°C: 2.5%/°C ; Storage: -40~+85°C						
	Humidity	Operating: 20% ~ 90% (non condensing) RH; Storage: 10% ~ 95% RH (non condensing)						
SAFETY	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, 1minute						
	Isolation resistance	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C/ 70% RH						
EMC	EMI	EN 55032 CLASS A · FCC CFR 47 PART 15 CLASS A						
	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8						
OTHERS	Cooling	Forced airflow cooling with DC fan						
	M.T.B.F.	215 K hours (min)						
	Dimension	150 x 140 x 86 mm (L*W*H)						
	Packing	N.W.:1.78 Kg / 1pc; 6 pcs/ 2.03 CUFT / 1 CTN						

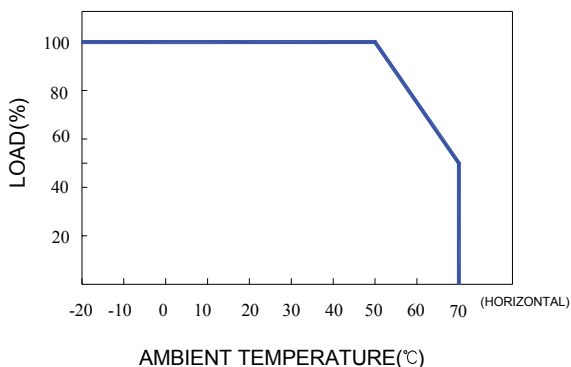
NOTE	① All measurements which not mentioned are based on 24VDC input, output Max at ambient 25°C / 70%RH.
	② Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-100% max load of each output, Total output must under output Max .
	③ Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated with a 0.1uF & a 10uF parallel capacitor.
	④ The operating temperature shall follow the de-rating curve in spec
	⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.

SDX-350-G24 Series

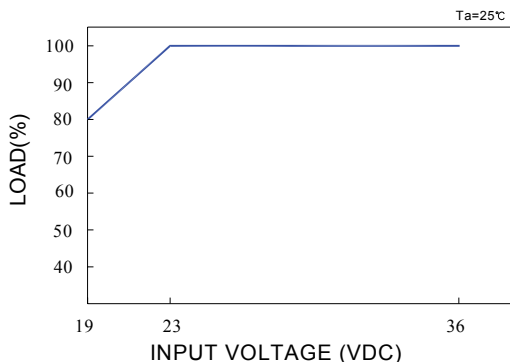
350W 24VDC Input ATX Power Supply



De-rating Curve :

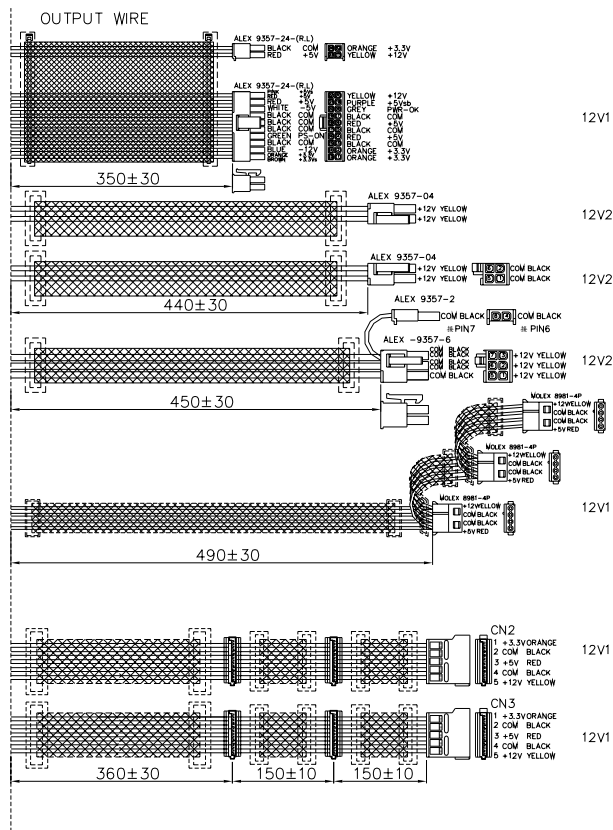
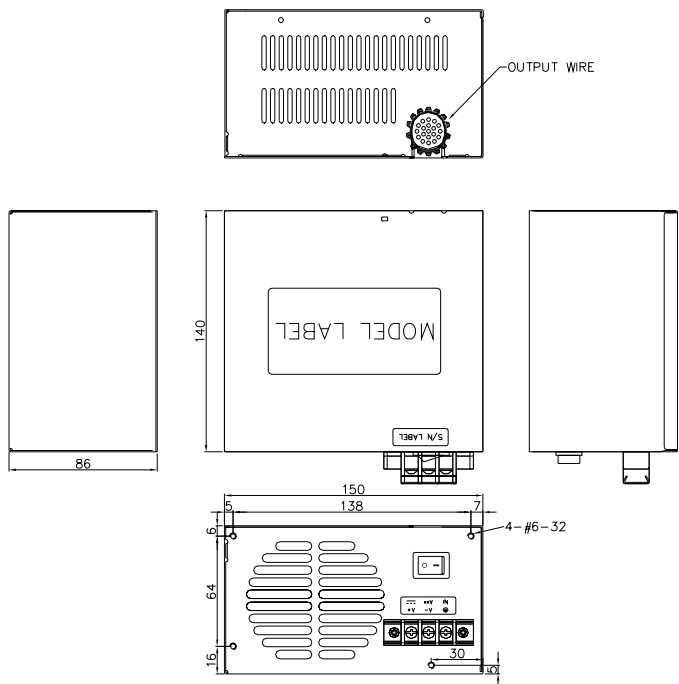


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



SDX-450-G24 Series

450W 24VDC Input ATX Power Supply



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * High efficiency and reliability
- * Soft start function, low inrush current
- * Input reverse polarity protection
- * 3.3V & 5V VRM design
- * -5V output option
- * Over voltage, over load & short circuit protection
- * With power good signal & PS-ON signal output
- * 100% full load burn-in test
- * Meet Intel ATX 2.31
- * UL, cUL, CB, CE standard
- * 3 years warranty

Specification:

INPUT	Voltage	19V ~ 36V DC (Typical 24V)						
	Current	<27A @ 23V DC input,						
	Protection	Ceramic Fuse 40A/250V						
OUTPUT	Voltage	5V	3.3V	12V1	12V2	-5V	-12V	5Vsb
	Min Load	0A	0A	0.5A	0A	0A	0A	0A
	Max Load	23A	20A	17A	17A	0.5A	1A	2.5A
	Output Tolerance ②	±3%	±5%	±3%	±3%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	150mV	150mV	100mV	150mV	70mV
	Efficiency (TYP.)	80%						
Output MAX.	Input Voltage : 19V ~ 23V total output max 400W ; Input Voltage : 23V ~ 36V total output max 450W 3.3V & 5V max 125W, -5V & -12V max 12W							
PROTECTION	Over Voltage	5.7V~6.5V	3.7V~4.1V	13.1V~14.5V		----	----	----
		Shutdown, it needs re-power on to recover						
	Over current (MAX)	30A	25A	20A	20A	----	----	----
	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and latch off, recover after re-start up.						
ELEC. CHAR.	Rise time	<20mS						
	Power good signal	Power ON within 100---500ms, high level TTL Signal release.						
ENVIRONMENT	Temperature ④	Operating: -20 ~ 70°C ; De-rating: 45 ~ 70°C : 2.5%/°C ; Storage: -40~+85°C						
	Humidity	Operating: 20% ~ 90% (non condensing) RH; Storage: 10% ~ 95% RH (non condensing)						
SAFETY	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, 1minute						
	Isolation resistance	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C / 70% RH						
EMC	EMI	EN 55032 CLASS A · FCC CFR 47 PART 15 CLASS A						
	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8						
OTHERS	Cooling	Forced airflow cooling with DC fan						
	M.T.B.F.	215 K hours (min)						
	Dimension	150 x 140 x 86 mm (L*W*H)						
	Packing	N.W.: 1.79 Kg / 1pc; 6 pcs/ 2.03 CUFT / 1 CTN						

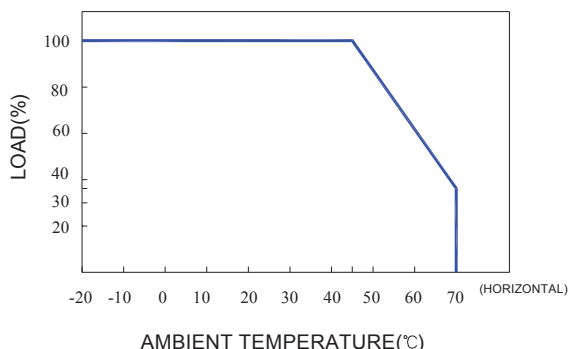
NOTE	①	All measurements which not mentioned are based on 24VDC input, output Max at ambient 25°C / 70%RH.
	②	Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-100% max load of each output, Total output t must under output Max .
	③	Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated with a 0.1uF & a 10uF parallel capacitor.
	④	The operating temperature shall follow the de-rating curve in spec
	⑤	The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.

SDX-450-G24 Series

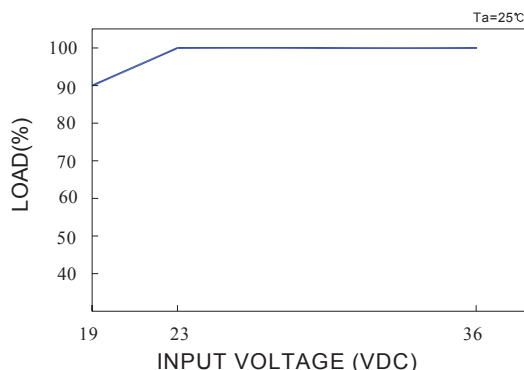
450W 24VDC Input ATX Power Supply



De-rating Curve : E2



Output De-rating Vs Input Voltage : DD14



Dimension:

(Unit: mm)

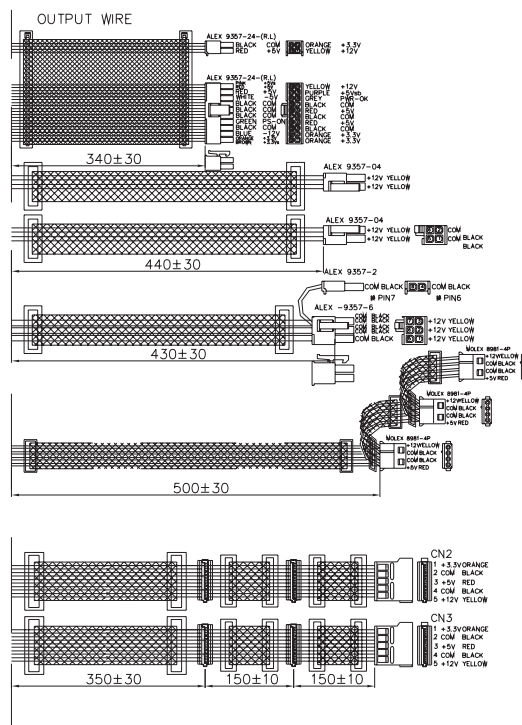
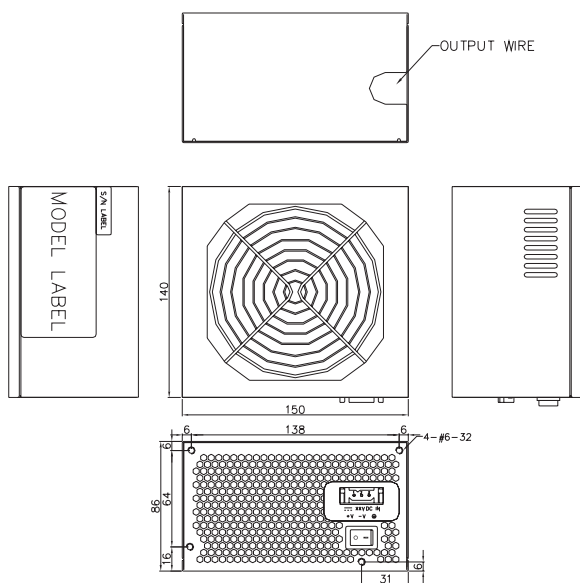
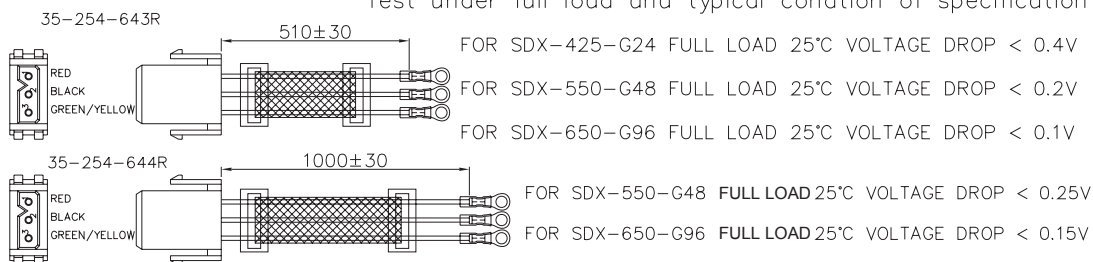
OPTION

35-254-643R

35-254-644R

The voltage drop was caused by wire loss ;

Test under full load and typical condition of specification



SDX-500-G48 Series

500W 48VDC Input ATX Power Supply



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * High efficiency and reliability
- * Soft start function, low inrush current
- * Input polarity reverse protection
- * 3.3V & 5V VRM design
- * -5V output option
- * Over voltage, over load & short circuit protection
- * With power good signal & PS-ON signal output
- * 100% full load burn-in test
- * Meet Intel ATX 2.31
- * Meet LVD standard
- * 3 years warranty

Specification:

INPUT	Voltage	36V~72V (Typical 48V)						
	Current	<20A @ 36V DC input						
	Protection	Ceramic Fuse 25A/250V						
OUTPUT	Voltage	5V	3.3V	12V1	12V2	-5V	-12V	5Vsb
	Min Load	0A	0A	1A	0A	0A	0A	0A
	Max Load	20A	20A	18A	18A	0.5A	1A	3A
	Output Tolerance ②	±3%	±5%	±3%	±3%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	150mV	150mV	100mV	150mV	70mV
	Efficiency (TYP.)	82%						
PROTECTION	Output MAX.	3.3V & 5V max 125W, -5V & -12V max 12W, total output max 500W						
	Over Voltage	5.7V~6.5V	3.7V~4.1V	13.1V~14.5V		----	----	----
		Shutdown, it needs re-power on to recover						
	Over current (MAX)	25A	25A	22A	22A	----	----	----
ELEC. CHAR.	Rise time	<20mS						
	Power good signal	Power ON within 100---500ms, high level TTL Signal release.						
ENVIRONMENT	Temperature ④	Operating: -20 ~ 70°C ; De-rating: 50 ~ 70°C: 2.5%/°C ; Storage: -40~+85°C						
	Humidity	Operating: 20% ~ 90% (non condensing) RH; Storage: 10% ~ 95% RH (non condensing)						
SAFETY	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, 1minute						
	Isolation resistance	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C / 70% RH						
EMC	EMI	EN 55032 CLASS A、FCC CFR 47 PART 15 CLASS A						
	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8						
OTHERS	Cooling	Forced airflow cooling with DC fan						
	M.T.B.F.	106 K hours						
	Dimension	150 x 140 x 86 mm (L*W*H)						
	Packing	N.W.: 1.8 Kg / 1pcs; 6 pcs/ 2.03 CUFT / 1 CTN						

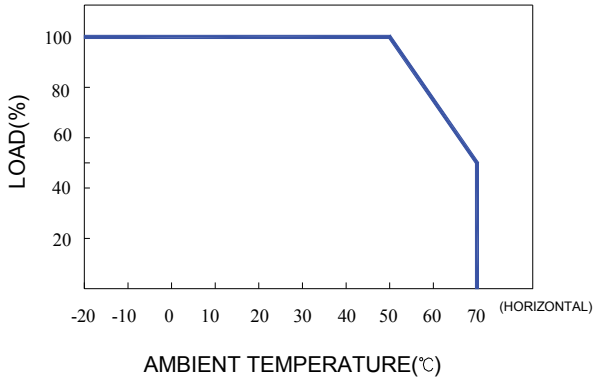
NOTE	①	All measurements which not mentioned are based on 48VDC input, output Max at ambient 25°C / 70%RH.
	②	Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-100% max load of each output, Total output must under output Max .
	③	Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~15" twisted pair-wire terminated with a 0.1uF & a 10uF parallel capacitor.
	④	The operating temperature shall follow the de-rating curve in spec
	⑤	The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.

SDX-500-G48 Series

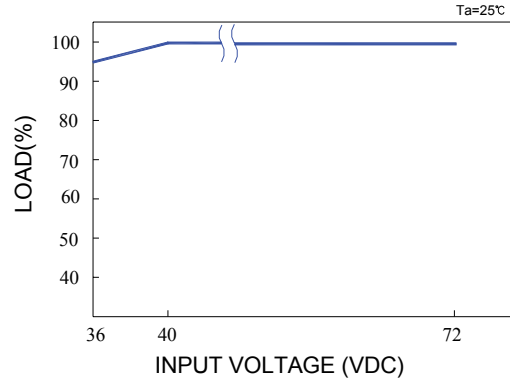
500W 48VDC Input ATX Power Supply



De-rating Curve :

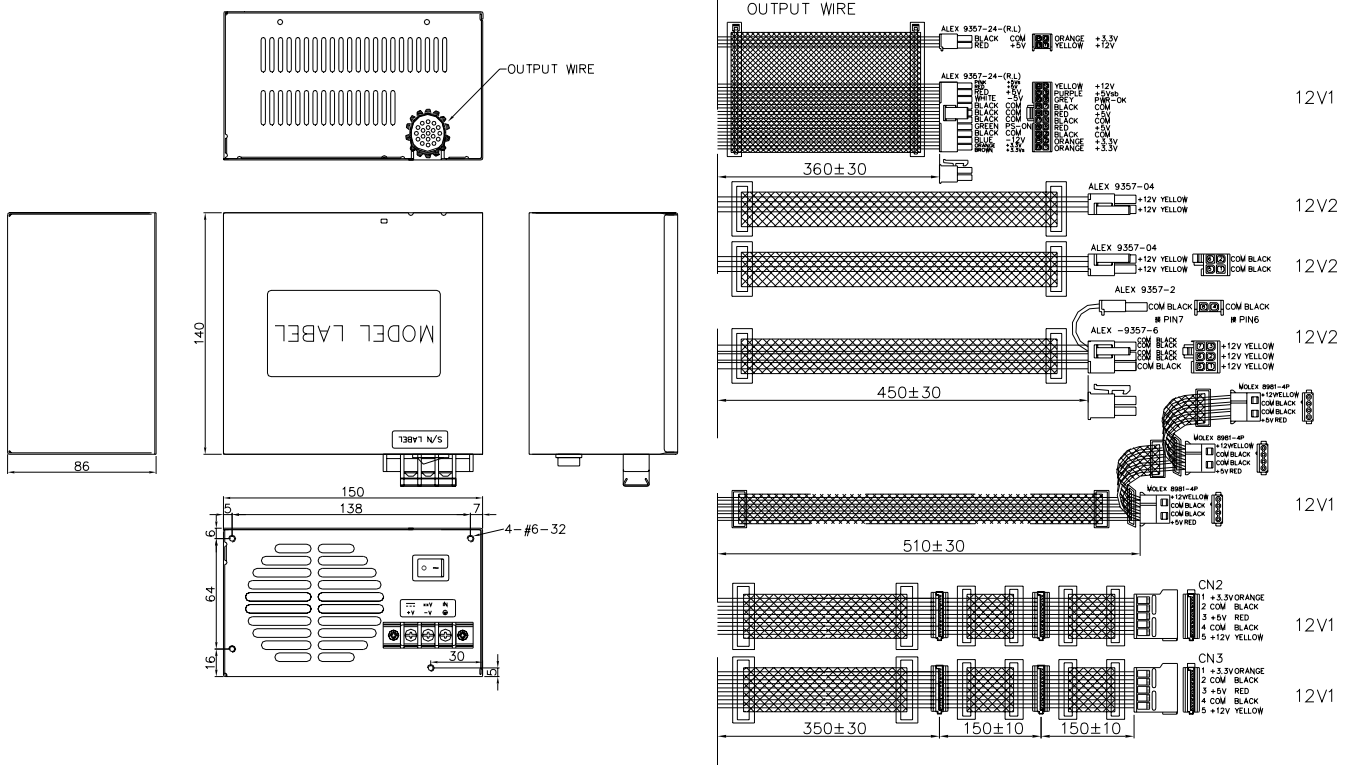


Output De-rating Vs Input Voltage



Dimension:

(Unit: mm)



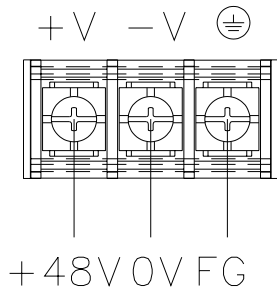
SDX-500-G48 Series

500W 48VDC Input ATX Power Supply

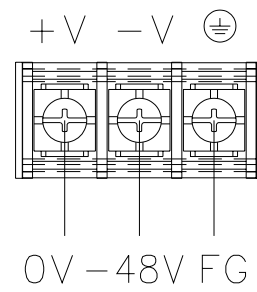


Input Voltage Connection:

A TYPE : +48V Input



B TYPE : -48V Input



SDX-550-G48 Series

550W 48VDC Input ATX Power Supply



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * High efficiency and reliability
- * Soft start function, low inrush current
- * Input reverse polarity protection
- * 3.3V & 5V VRM design
- * -5V output option
- * Over voltage, over load & short circuit protection
- * With power good signal & PS-ON signal output
- * 100% full load burn-in test
- * Meet Intel ATX 2.31
- * Meet LVD standard
- * 3 years warranty

Specification:

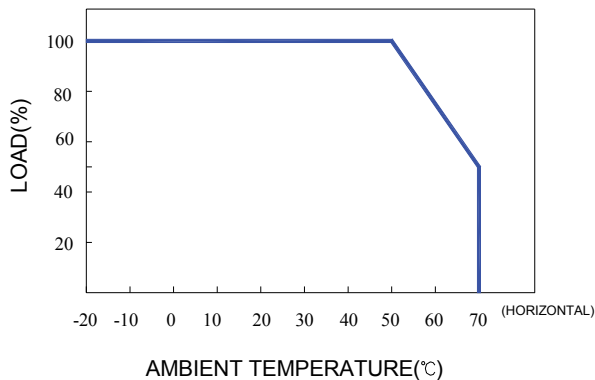
INPUT	Voltage	36V~72V (Typical 48V)						
	Current	<22A @ 36V DC input						
	Protection	Ceramic Fuse 30A/250V						
OUTPUT	Voltage	5V	3.3V	12V1	12V2	-5V	-12V	5Vsb
	Min Load	0A	0A	1A	0A	0A	0A	0A
	Max Load	23A	23A	18A	18A	0.5A	1A	3A
	Output Tolerance ②	±3%	±5%	±3%	±3%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	150mV	150mV	100mV	150mV	70mV
	Efficiency (TYP.)	81%						
PROTECTION	Output MAX.	3.3V & 5V max 145W, -5V & -12V max 12W, total output max 550W						
	Over Voltage	5.7V~6.5V	3.7V~4.1V	13.1V~14.5V		----	----	----
		Shutdown, it needs re-power on to recover						
	Over current (MAX)	28A	28A	22A	22A	----	----	----
ELEC. CHAR.	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and latch off, recover after re-start up.						
	Rise time	<20mS						
ENVIRONMENT	Power good signal	Power ON within 100---500ms, high level TTL Signal release.						
	Temperature ④	Operating: -10 ~ 70°C ; De-rating: 50 ~ 70°C: 2.5%/°C ; Storage: -20~+85°C						
SAFETY	Humidity	Operating: 20% ~ 90% (non condensing) RH; Storage: 10% ~ 95% RH (non condensing)						
	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, 1minute						
EMC	Isolation resistance	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C / 70% RH						
	EMI	EN 55032 CLASS A · FCC CFR 47 PART 15 CLASS A						
OTHERS	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8						
	Cooling	Forced airflow cooling with DC fan						
	M.T.B.F.	106 K hours						
	Dimension	150 x 140 x 86 mm (W*L*H)						
NOTE	Packing	N.W.: 1.8 Kg / 1pcs; 6 pcs/ 2.03 CUFT / 1 CTN						
		① All measurements which not mentioned are based on 48VDC input, output Max at ambient 25°C / 70%RH. ② Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-100% max load of each output, Total output must under output Max . ③ Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor. ④ The operating temperature shall follow the de-rating curve in spec ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.						

SDX-550-G48 Series

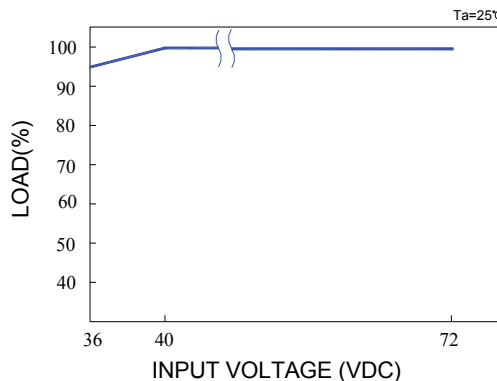
550W 48VDC Input ATX Power Supply



De-rating Curve :



Output De-rating Vs Input Voltage



Dimension:

(Unit: mm)

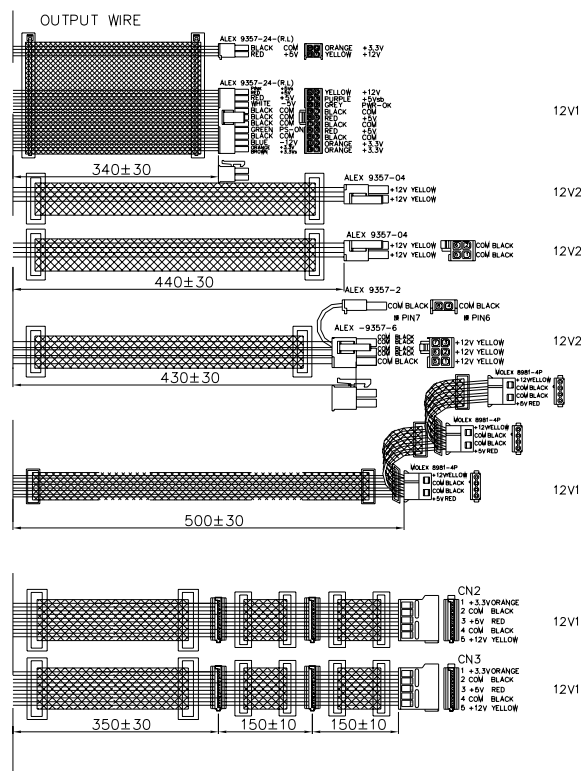
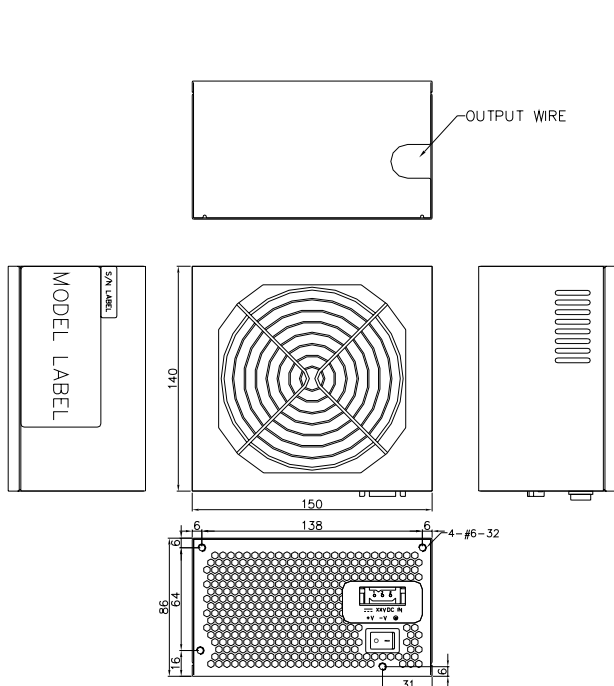
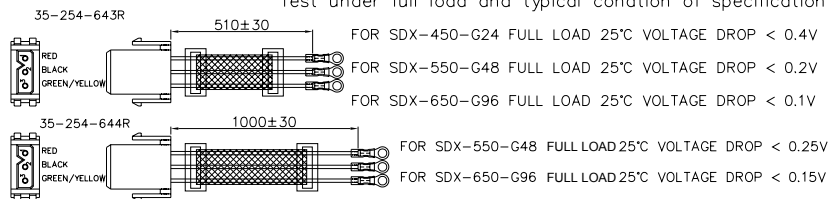
OPTION

35-254-643R

35-254-644R

The voltage drop was caused by wire loss ;

Test under full load and typical condition of specification



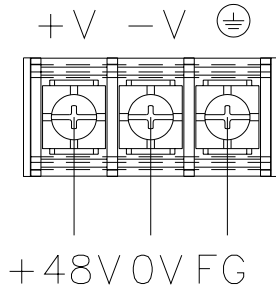
SDX-550-G48 Series

550W 48VDC Input ATX Power Supply

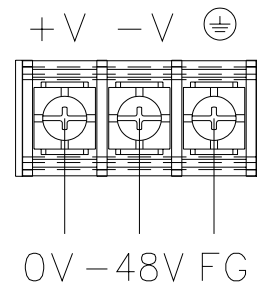


Input Voltage Connection:

A TYPE : +48V Input



B TYPE : -48V Input



SDX-600-G96 Series

600W 96VDC Input ATX Power Supply



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * High efficiency and reliability
- * Soft start function, low inrush current
- * Input polarity reverse protection
- * 3.3V & 5V VRM design
- * -5V output option
- * Over voltage, over current, over load & short circuit protection
- * With power good signal & PS-ON signal output
- * 100% full load burn-in test
- * Meet Intel ATX 2.01 / ATX 2.31 / ATX 12V
- * LVD approved
- * 3 years warranty

Specification:

INPUT	Voltage	72V~144V (Typical 96V)						
	Current	<10A @ 80V DC input						
	Protection	Ceramic Fuse 15A/250V						
OUTPUT	Voltage	5V	3.3V	12V1	12V2	-5V	-12V	5Vsb
	Min Load	0A	0A	1A	0A	0A	0A	0A
	Max Load	20A	20A	22A	22A	0.5A	1A	3A
	Output Tolerance ②	±3%	±5%	±3%	±3%	±5%	±10%	±5%
	Ripple Noise MAX.	70mV	70mV	150mV	150mV	100mV	150mV	70mV
	Efficiency (TYP.)	84%						
	Output MAX.	3.3V & 5V max 125W, -5V & -12V max 12W, total output max 600W						
PROTECTION	Over Voltage	5.7V~6.5V	3.7V~4.1V	13.1V~14.5V		----	----	----
		Shutdown, it needs re-power on to recover						
	Over current (MAX)	25A	25A	27A	27A	----	----	----
	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and latch off, recover after re-start up.						
ELEC. CHAR.	Rise time	<20mS						
	Power good signal	Power ON within 100---500ms, high level TTL Signal release.						
ENVIRONMENT	Temperature ④	Operating: -20 ~ 70°C ; De-rating: 45 ~ 70°C: 2%/°C ; Storage: -40~+85°C						
	Humidity	Operating: 20% ~ 90% (non condensing) RH; Storage: 10% ~ 95% RH (non condensing)						
SAFETY	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, 1minute						
	Isolation resistance	I/P-O/P, I/P-FG, >100MΩ/500VDC at 25°C/ 70% RH						
	Safety standard	IEC 62368-1 : 2014(Second Edition) and/or EN 62368-1 : 2014+A11 : 2017						
EMC	EMI	EN 55032 CLASS A 、FCC CFR 47 PART 15 CLASS A						
	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8						
OTHERS	Cooling	Forced airflow cooling with DC fan						
	M.T.B.F.	106 K hours						
	Dimension	150 x 140 x 86 mm (L*W*H)						
	Packing	N.W.: 1.8 Kg / 1pcs; 6 pcs/ 2.03 CUFT / 1 CTN						
NOTE	①	All measurements which not mentioned are based on 96VDC input, output Max at ambient 25°C / 70%RH.						
	②	Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-100% max load of each output, Total output must under output Max .						
	③	Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated with a 0.1uF & a 10uF parallel capacitor.						
	④	The operating temperature shall follow the de-rating curve in spec						
	⑤	The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.						

SDX-650-G96 Series

650W 96VDC Input ATX Power Supply



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * High efficiency and reliability
- * Soft start function, low inrush current
- * Input reverse polarity protection
- * 3.3V & 5V VRM design
- * -5V output option
- * Over voltage, over current, over load & short circuit protection
- * With power good signal & PS-ON signal output
- * 100% full load burn-in test
- * Meet Intel ATX 2.01 / ATX 2.31 / ATX 12V
- * LVD approved
- * 3 years warranty

Specification:

INPUT	Voltage	72V~144V (Typical 96V)						
	Current	<11A @ 80V DC input						
	Protection	Ceramic Fuse 15A/250V						
OUTPUT	Voltage	5V	3.3V	12V1	12V2	-5V	-12V	5Vsb
	Min Load	0A	0A	1A	0A	0A	0A	0A
	Max Load	23A	23A	22A	22A	0.5A	1A	3A
	Output Tolerance ②	±3%	±5%	±3%	±3%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	150mV	150mV	100mV	150mV	70mV
	Efficiency (TYP.)	83%						
	Output MAX.	3.3V & 5V max 145W, -5V & -12V max 12W, total output max 650W						
PROTECTION	Over Voltage	5.7V~6.5V	3.7V~4.1V	13.1V~14.5V		----	----	----
		Shutdown, it needs re-power on to recover						
	Over current (MAX)	28A	28A	27A	27A	----	----	----
	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and latch off, recover after re-start up.						
ELEC. CHAR.	Rise time	<20mS						
	Power good signal	Power ON within 100---500ms, high level TTL Signal release.						
ENVIRONMENT	Temperature ④	Operating: -20 ~ 70°C ; De-rating: 50 ~ 70°C : 2.5%/°C ; Storage: -40~+85°C						
	Humidity	Operating: 20% ~ 90% (non condensing) RH; Storage: 10% ~ 95% RH (non condensing)						
SAFETY	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, 1minute						
	Isolation resistance	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C / 70% RH						
	Safety standard	IEC 62368-1 : 2014(Second Edition) and/or EN 62368-1 : 2014+A11 : 2017						
EMC	EMI	EN 55032 CLASS A 、 FCC CFR 47 PART 15 CLASS A						
	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8						
OTHERS	Cooling	Forced airflow cooling with DC fan						
	M.T.B.F.	106 K hours						
	Dimension	150 x 140 x 86 mm (W*L*H)						
	Packing	N.W.: 1.8 Kg / 1pc; 6 pcs/ 2.03 CUFT / 1 CTN						

NOTE	①	All measurements which not mentioned are based on 96VDC input, output Max at ambient 25°C / 70%RH.
	②	Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-100% max load of each output, Total output must under output Max .
	③	Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor.
	④	The operating temperature shall follow the de-rating curve in spec
	⑤	The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.

