



## ±120V DC Input Industrial PC ATX Switching Mode Power Supply

Series	Model no.	Output watts	Input voltage	Input voltage range	Polarity reverse protection
<b>120</b>	STC-120500	500W	±120V DC	±80V ~ ±150V DC	Protected (Max.200V DC)
	STC-120450	450W			
	STC-120350	350W			

### ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **80x80x25 mm Fan x 1 pcs**
- ▶ Fan type (**350W**): DC type, 2 x Ball Bearing, brand SUNON, 3200 rpm, no Fan Control Card
- ▶ Fan type (**450W, 500W**): DC type, 2 x Ball Bearing, brand DELTA, 4000 rpm, with Fan Control Card
- ▶ Operating Temperature: 0°C~+50°C (-20°C ~ +60°C optional) Full Load
- ▶ Output Power: 100% @ 50°C, 70% @ 60°C, 50% @ 70°C
- ▶ Operating Humidity: 20%~85% RH. (Non condensing)
- ▶ Storage Temperature: -20°C~+80°C
- ▶ Storage Humidity: 10%~90% RH. (Non condensing)
- ▶ Operating Altitude: 10M Below Sea level to 3000M Above Sea level

### DC INPUT CHARACTERISTICS:

- ▶ Input connector type 25A/300V UL Approved Gold Plated Brass 1.2t/3-Pin Terminal
- ▶ Input connection Make sure plug power source according to the label instruction.
- ▶ Input Current 4.3A/7.3A(500W) 4A/6A(450W) 3A/5A (350W)  
@ Full Load High Line & Low Line
- ▶ Inrush Current Less than 6A Cold start @25°C ambient

### DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current						Ripple & Noise
	Load	Line	Cross	500W		450W		350W		
				Min.	Max.	Min.	Max.	Min.	Max.	
+5V	±5%	±1%	±5%	0A	45A	0A	45A	0A	40A	50mV
+12V				0A	40A	0A	35A	0A	20A	120mV
+3.3V				0A	30A	0A	30A	0A	21A	50mV
-12V	±8%			0A	1A	0A	1A	0A	1A	120mV
+5VSB	±5%			0A	2A	0A	2A	0A	2A	50mV
Maximum continuous combined load on +3.3 V & +%V DC output shall not exceed				225		225		200		Wattage
Maximum continuous total DC output power shall not exceed				500		450		300		
Remarq: MOQ								40pcs		

## OVERALL PERFORMANCE:

- ▶ Efficiency: 75% typical @120V DC Full Load
- ▶ Hold up time:
- ▶ Rise time:
- ▶ Power Good Signal: TTL Compatible signal, on delay 100~500ms, off delay 1ms min.
- ▶ Short Circuit Protection (SCP): All output equipped with SCP (shutdown and latch off)
- ▶ Over Power Protection (OPP): Peak power protected to 130%±10% of continuous rated power (shutdown and latch off)
- ▶ Over Voltage Protection (OVP): +3.3V@4.5V, +5V@6V, +12v@15.6V

## RELIABILITY:

- ▶ MTBF: 100,000 hours @max. Load, 120V DC & 25°C ambient
- ▶ Safety Standards: Meet IEC60950-1, EN60950-1
- ▶ Safety Approved:
- ▶ EMI Compatibility (EMC): EN55032:2015/AC:2016, CISPR32:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN55024:2010 +A1:2015

## ISOLATION:

- ▶ INPUT and OUTPUT are isolated by transformers and optical couplers
- ▶ Dielectric Withstand: INPUT to OUTPUT: 2000V DC for 60 seconds
- ▶ Dielectric Withstand: INPUT to FRAME GROUND: 2000V DC for 60 seconds
- ▶ Leakage Current: <0.005µA @120V DC

## Output Device Connector Specific:

ATX 24 Pins x 1	Molex 29-01-2240 or equivalent
12V(P4) 4 Pin x 1	Molex 39-01-2040 or equivalent
HDD, DVD 4 Pin x 2	Molex 8981-04P or equivalent
FDD 4 Pin x 1	AMP 171822-4 or equivalent
Serial ATA x 4	Molex 675820000 or equivalent
Process EPS 8 Pin x 1	Molex 39-01-2080 or equivalent
PCIe (6+2) x 1	

## Standard Output Cable Length:

550 mm / 21.65 Inches

## Power Chassis Dimension:

140(L) x 150(W) x 86(H) mm / 5.51(L) x 5.9(W) x 3.39(H) Inches

## Net Weight:

2~2.3 kg / 4.4~5.07 Lbs

## Gross Weight:

2.1~2.4 kg / 4.63~5.29 Lbs

## Packing Detail:

8 PCs

## Measurement of Carton:

0.054 m<sup>3</sup> / 1.92Cuft