



±120V DC Input Industrial PC ATX 2.03 2U Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
120	STC-120750D	750 W	±120V DC	±90V ~ ±144V DC	Protected (Max.200V DC)
	STC-120600D	600 W			

* H version (Black color chassis)

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, 60x60x25 mm Fan x 1 (With Two Ball Bearing)
- ▶ Fan Noise Level: 63dBA @ Full Load
- ▶ Fan brand: DELTA, NMB, SUNON, SUNON IP68 (for H version) with the same specification
- ▶ Operating Temp.: 0°C~+50°C Full Load
- ▶ Operating Temp.: / H version -20°C~+60°C Full Load
- ▶ 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 6.35A/10A(**750W**) 5A/8A(**600W**) @Full Load High Line & Low Line
- ▶ Inrush Current Less than 20A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current				Ripple & Noise		
	Load	Line	Cross	750W		600W				
				Min.	Max.	Min.	Max.			
+5V	±1%	±1%	±5%	0A	30A	0A	25A	50mV		
+12V				0A	50A	0A	48A	120mV		
+3.3V				0A	30A	0A	25A	50mV		
-5V										
-12V	±8%				0A	1A	0A	0.83A	120mV	
+5VSB	±5%				0A	3A	0A	3.5A	50mV	
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				720		570		Wattage		
Maximum continuous total DC output power shall not exceed				750		600				

OVERALL PERFORMANCE:

- ▶ Efficiency: 78% 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: >80,000 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: 2500V DC for 60 seconds
- ▶ Dielectric Withstand: INPUT to FRAME GROUND: 2500V 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
- ▶ ATX 24 Pins x 1 Molex 29-01-2240 or equivalent
- ▶ HDD, DVD 4 Pins x 2 Molex 8981-04P or equivalent
- ▶ FDD 4 Pins x 1 AMP 171822-4 or equivalent
- ▶ Serial ATA x 4 Molex 675820000 or equivalent
- ▶ CPU EPS 8 Pins x 1 Molex 39-01-2080 or equivalent
- ▶ CPU EPS 4 Pins x 1 Molex 39-01-2040 or equivalent
- ▶ PCIe 8pin (6+2) x 4

Standard Output Cable Length:

550 mm / 21.65 Inches

PCB specific:

- ▶ Layers: 2 / **STC-120600D**
4 / **STC-120750D**
- ▶ Copper: 3 Oz
- ▶ Thickness: 1.6mm
- ▶ Material: FR4
- ▶ PCB material origin: Taiwan

Power Chassis Dimension:

220(W) x 100(L) x 70(H) mm / 8.66(L) x 3.94(W) x 2.76(H) inches / **STC-120600D**
315(W) x 100(L) x 70(H) mm / 12.4(L) x 3.94(W) x 2.76(H) inches / **STC-120750D**

Net Weight:

1 pc / 2.4 kg / 5.29 lbs / **STC-120600D**
1 pc / 3.11 kg / 6.85 lbs / **STC-120750D**

Gross Weight:

1 pc / 2.6 kg / 5.73 lbs / **STC-120600D**
8 pcs / 21.5 kg / 47.39 lbs / **STC-120600D**
1 pc / 3.4 kg / 7.49 lbs / **STC-120750D**
4 pcs / 14 kg / 30.86 lbs / **STC-120750D**

Packing Detail / Measurement of Carton:

1 pc / 30.2 x 19 x 11.5 cm / **STC-120600D**
8 pcs / 61 x 41 x 24 cm / 2.11 Cuft / 0.06 m³ / **STC-120600D**
1 pc / 39.7 x 19 x 11.5cm / **STC-120750D**

4 pcs / 41 x 40 x 24 cm / 1.377 Cuft / 0.039 m³ / **STC-120750D**