



Backplane  
Systems  
Technology

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## 24V DC Input Industrial PC ATX 2.01 & 2.03 PS2 Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
<b>24</b>	STC-24750	750W continuous	±24V DC	±18V ~ ±36V DC	Protected (60V DC)
	STC-24700	700W continuous			Protected (60V DC)
	STC-24650	650W continuous			Protected (60V DC)
	STC-24600	600W continuous			Protected (60V DC)
	STC-24550	550W continuous			Protected (60V DC)
	STC-24500	500W continuous			Protected (60V DC)

### ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **80x80x25 mm Fan x 1 pcs**
- ▶ Fan type: DC type, 2 x Ball Bearing, brand DELTA, 4000 rpm, Optional Fan Control Card
- ▶ Fan Noise Level: 60dBA @ Full Load (for STC-24750)
- ▶ Operating Temperature: **0°C~+60°C (-20°C~+60°C optional)** Full Load
- ▶ Output Power: 100°C @60°C, 70°C @70°C
- ▶ Operating Humidity: 20%~85% RH. (Non condensing) (95%) optional
- ▶ 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 100A/300V UL Approved Gold Plated Brass 1.2t/3-pin Terminal
- ▶ Input connector type Make sure plug power source according to the lable instruction
- ▶ Input Current 27A/54A(750W) 25.3A/50.5A(700W) 23.5A/47A(650W)  
@Full Load High Line & Low Line
- ▶ Inrush Current Less than 50A Cold start @25°C ambient

### DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current												Ripple & Noise	
	Load	Line	Cross	750W		700W		650W		600W		550W		500W			
				Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
<b>+5V</b>	±5%	±1%	±5%	0A	60A	0A	60A	0A	60A	0A	60A	0A	50A	0A	50A	50mV	
<b>+12V</b>				0A	48A	0A	48A	0A	48A	0A	40A	0A	38A	0A	35A	120mV	
<b>+3.3V</b>				0A	35A	0A	35A	0A	35A	0A	35A	0A	30A	0A	30A	50mV	
<b>-12V</b>				±8%	0A	1A	0A	1A	0A	1A	0A	1A	0A	1A	0A	1A	120mV
<b>+5VSB</b>				±5%	0A	3A	0A	3A	0A	3A	0A	3A	0A	3A	0A	3A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				<b>300</b>	<b>300</b>	<b>300</b>	<b>300</b>	<b>250</b>	<b>250</b>								
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				<b>720</b>	<b>670</b>	<b>620</b>	<b>570</b>	<b>520</b>	<b>470</b>							<b>Wattage</b>	



Maximum continuous total DC output power shall not exceed	<b>750</b>	<b>700</b>	<b>650</b>	<b>600</b>	<b>550</b>	<b>500</b>	
Remark: MOQ or sample charge					<b>24pcs</b>	<b>24pcs</b>	

### OVERALL PERFORMANCE:

- ▶ Efficiency: 75% typical @24V DC Full Load
- ▶ 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, 24V 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: 500V DC for 60 seconds
- ▶ Dielectric Withstand: INPUT to FRAME GROUND: 500V DC for 60 seconds
- ▶ Leakage Current: <0.005µA @24V DC

### Output Device Connector Specific:

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

### Standard Output Cable Length From Chassis:

530 mm / 20.87 inches

### Power Chassis Dimension:

170(L) x 150(W) x 86(H) mm/ 6.69(L) x 5.9(W) x 3.37(H) inches

### Screw hole:

Front Panel with 4 screw holes  
Rear Panel bracket with 2 screw holes

### Net Weight:

3 kg / 6.6 lbs

### Gross Weight:

3.45 kg /7.59 lbs

### Packing Detail:

4 PCs

### Measurement of Carton:

2.33 Cuft /36 x 35 x 51 cm  
G.W. 14kg



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**Input terminal connection by parallel wires:**

