



## ±12V DC Input Industrial PC ATX Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input range	Polarity protection
<b>12</b>	STC-12320	320 W continuous	±12V DC	±9V ~ ±18V DC	Protected (Max.50V 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, with Fan Control Card
- ▶ Operating Temperature: 0°C~+50°C (-20°C~+60°C Optional)
- ▶ 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 50A/300V UL Approved Gold plated brass 1.2t/ 3-Pin Terminal
- ▶ Input Current 27A/53A(320W) @Full Load High Line & Low Line
- ▶ Inrush Current Less than 90A Cold start @25°C ambient

### DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current		Ripple & Noise
	Load	Line	Cross	320W		
+5V	±5%	±1%	±5%	Min.	Max.	50mV
+12V				0A	30A	
+3.3V				0A	15A	
-5V				0A	1A	
-12V	±8%			0A	0.8A	120mV
+5VSB	±5%			0A	3A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				150		Watts
Maximum continuous combine load on +3.3V & +5V * +12V DC should not exceed				290		
Maximum continuous total DC output power shall not exceed				320		

### OVERALL PERFORMANCE:

- ▶ Efficiency: 65% typical @12V 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 protection)
- ▶ 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 and +12V DC @ 15.6V DC

### RELIABILITY:

- ▶ MTBF: 90,000 hours @max. Load, 12V DC & 25°C ambient



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- ▶ 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 @12V 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:**

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 3.38(H) Inches

#### **Net Weight:**

2 kg / 4.4 lbs

#### **Gross Weight:**

2.5 kg / 5.51 lbs

#### **Packing Detail:**

8 PCs

#### **Measurement of Carton:**

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