



±12V DC Input Industrial PC ATX 2.01 & 2.03 Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection	Input Connector
12	STC-121100	1100 W continuous	±12V DC	±9V ~ ±18V DC	Not Protected	Screw Terminal
12	STC-121100-T	1100 W continuous	±12V DC	±9V ~ ±18V DC	Not Protected	Cable Harness

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, 80x80x38 mm Fan x 1 pcs
- ▶ Fan type: DC type, 2 x Ball Bearing, 6200 rpm, Optional Fan Control Card
- ▶ Fan brand: DELTA, NMB, SUNON, SUNON IP68 (for H version). Specifications are equivalent
- ▶ Operating Temperature: 0°C~+50°C (-30°C~+60°C Optional H version) 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: 200A/300V UL Approved Gold Plated Brass 2 Pin 12.5mm Screw Terminal
- ▶ Input connector (T-option): Input Cable Harness (refer to STC-DTD-255-T enclosure drawing) SB175 connector
- ▶ Input Current: 81A/163A(1100W) 74A/148A(1000W) @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	Min.	Max.	
+5V	±5%	±1%	±5%	1100W		50mV
+12V				0A	25A	
+3.3V				0A	88A	
-12V				0A	25A	
+5VSB				0A	1A	
The output current of combined load on +3.3 V & +5V DC output shall not exceed				40A	A	
Maximum continuous total DC output power shall not exceed				1100	Wattage	

OVERALL PERFORMANCE:

- ▶ Efficiency: 67% typical @12V 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: >90,000 hours @max. Load, 12V 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 @ 12V DC

Output Device Connector Specific:

ATX 24 Pins x 1	Molex 29-01-2240 or equivalent
+12V(P4) 4 Pins x 1	Molex 39-01-2040 or equivalent
HDD, DVD 4 Pins x 2	Molex 8981-04P or equivalent
FDD 4 Pins x 2	AMP 171822-4 or equivalent
Serial ATA x 8	Molex 675820000 or equivalent
Process EPS 8 Pins x 2	Molex 39-01-2080 or equivalent
PCIe 6 + 2 pin x 4 (Max Optional 10 sets)	

Standard Output Cable Length:

610 mm / 24 Inches

PCB specific:

- ▶ 8 Layer 1.78mm
- ▶ Copper: 3 Oz each layer
- ▶ Thickness: 1.6 mm
- ▶ Material: FR4
- ▶ PCB material origin: Taiwan

Power Chassis Dimension:

255(L) x 150(W) x 86(H) mm / 10.039(L) x 5.9(W) x 3.39(H) Inches

Net Weight:

4.3 kg / 9.479 lbs

Gross Weight:

4.8 kg / 10.582 lbs

Packing Detail:

2 PCs
GW 10.8 kg

Measurement of Carton:

41 x 28 x 41 cm
0.047 m³ / 1.66 Cuft

Optional Connection Wire:

- ▶ 2 x Single wire / 4AWG / UL1015 / Red & Black one set / Standard length 3m (optional length is available)
- ▶ 2 x Single wire / 2AWG / UL1015 / Red & Black one set / Standard length 3m (optional length is available)