



**±24V DC Input Industrial PC ATX 2.01 & 2.2 & 3.0
Switching Mode Power Supply**

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
24	STC-241100	1100 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected
	STC-241000	1000 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected
	STC-24900	900 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected
	STC-24850	850 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected

* H version (Black color chassis)

ENVIRONMENTAL CONDITIONS:

- Cooling: Forced Air-cooling, 80x80x25 mm Fan x 2 pc / **STC-24850**
- Cooling: Forced Air-cooling, 80x80x38 mm Fan x 1 pc / **STC-24900, STC-241000, STC-241100**
- Fan type: DC type, 2 x Ball Bearing, 6200 rpm / **STC-24850**
- Fan Noise Level: 40 dBA (DELTA fan brand Official Data at 4000 rpm, 46.62 CFM) @ Full Load
- Fan Noise Level tested: 58 dBA @ Distance 1m (DELTA fan brand 4000 rpm, 46.62 CFM) @ Full Load
- Fan brand: DELTA, NMB, SUNON, SUNON IP68 (for H version) with the same specification
- Optional Fan R.P.M. Control card
- Operating Temp.: 0°C~+50°C Full Load
- Operating Temp.: / **H version** -30°C~+60°C Full Load
- Output Power: 100% @ 50°C, 70% @ 60°C, 50% @ 70°C
- Output Power: / **H version** 100% @ 60°C, 70% @ 65°C, 50% @ 70°C
- Operating Humidity: 20%~85% RH Non condensing
- Operating Humidity: / **H version** 95% RH Non condensing
- Storage Temperature: -40°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: 200A/300V UL Approved Gold Plated Brass 2 Pin 12.5mm Screw Terminal
- Input Current: 29A/55A(**850W**) 31A/59A(**900W**) 35.5A/71A(**1000W**) 37.5A/75A(**1100W**)
@Full Load High Line & Low Line
- Inrush Current: Less than 80A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current								Ripple & Noise
	Load	Line	Cross	1100W		1000W		900W		850W		
				Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
+5V	±5%	±1%	±5%	0A	25A	0A	25A	0A	25A	0A	30A	50mV
+12V				0A	80A	0A	72.2A	0A	68A	0A	60A	120mV
+3.3V				0A	22A	0A	22A	0A	22A	0A	30A	50mV
-12V				0A	0.3A	0A	0.3A	0A	0.3A	0A	1A	120mV
+5VSB	±5%			0A	2.5A	0A	2.5A	0A	2.5A	0A	3.5A	50mV
The output current of combined load on +3.3 V & +5V DC output shall not exceed				40		40		40		40		A
Maximum continuous total DC output power shall not exceed				1100		1000		900		850		Wattage

OVERALL PERFORMANCE:

- ▶ Efficiency: 75% typical @24V DC Full Load / **STC-24850**
- ▶ Efficiency: 79% typical @50°C 24V DC Full Load / **STC-24900, STC-241000, STC-241100**
- ▶ Efficiency: 77% typical @60°C 24V DC Full Load / **STC-24900, STC-241000, STC-241100**
- ▶ 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, 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 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 / **STC-24850**
- ▶ FDD 4 Pins x 2 AMP 171822-4 or equivalent / **STC-24900, STC-241000, STC-241100**
- ▶ Serial ATA x 4 Molex 675820000 or equivalent / **STC-24850**
- ▶ Serial ATA x 8 Molex 675820000 or equivalent / **STC-24900, STC-241000, STC-241100**
- ▶ CPU EPS 8 Pins x 1 Molex 39-01-2080 or equivalent / **STC-24850**
- ▶ CPU EPS 8 Pins x 2 Molex 39-01-2080 or equivalent / **STC-24900, STC-241000, STC-241100**
- ▶ PCIe 6 + 2 pin x 2 **STC-24850**
- ▶ PCIe 6 + 2 pin x 4 (Max 8 sets) **STC-24900, STC-241000, STC-241100**

Standard Output Cable Length:

550 mm / 21.65 Inches

PCB specific:

▶ 2 Layer	STC-24850
▶ 6 Layer	STC-24900, STC-241000, STC-241100
▶ Copper:	3 Oz each layer
▶ Thickness:	1.6 mm
▶ Material:	FR4
▶ PCB material origin:	Taiwan

Power Chassis Dimension:

184(L) x 150(W) x 86(H) mm / 7.24(L) x 5.9(W) x 3.39(H) Inches

Net Weight:

3.5 kg / 7.716 lbs	STC-24850
4 kg / 8.816 lbs	STC-24900, STC-241000, STC-241100

Gross Weight:

4 kg / 8.818 lbs	STC-24850
4.4 kg / 9.698 lbs	STC-24900, STC-241000, STC-241100

Packing Detail:

4 PCs / GW 15.6 kg	STC-24850
4 PCs / GW 17.6 kg	STC-24900, STC-241000, STC-241100

Measurement of Carton:

36 x 35 x 51 cm
0.066 m3 / 2.33 Cuft