



**±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
<b>24</b>	STC-24900	900 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected
	STC-24850	850 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected

**ENVIRONMENTAL CONDITIONS:**

- ▶ Cooling / STC-24850                      Forced Air-cooling, 80x80x25 mm Fan x 2 pc
- ▶ Cooling / STC-24900                      Forced Air-cooling, 80x80x38 mm Fan x 1 pc
- ▶ Fan type / STC-24850                      DC type, 2 x Ball Bearing, 6200 rpm
- ▶ Fan type / STC-24900                      DC type, 2 x Ball Bearing, 4900 rpm
- ▶ Fan brand:                                      DELTA, NMB, SUNON, SUNON IP68 (for H version) with the same specification
- ▶ Optional Fan R.P.M. Control card
- ▶ 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:                      -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) @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	900W		850W				
				Min.	Max.	Min.	Max.			
+5V	±5%	±1%	±5%	0A	25A	0A	30A	50mV		
+12V				0A	68A	0A	60A	120mV		
+3.3V				0A	25A	0A	30A	50mV		
-12V				±8%		0A	1A	0A	1A	120mV
+5VSB				±5%		0A	3.5A	0A	3.5A	50mV
The output current of combined load on +3.3 V & +5V DC output shall not exceed				40		40		A		
Maximum continuous total DC output power shall not exceed				900		850		Wattage		

**OVERALL PERFORMANCE:**

- ▶ Efficiency:                                      75% typical @24V 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, 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 / STC-24850	AMP 171822-4 or equivalent
FDD 4 Pins x 2 / STC-24900	AMP 171822-4 or equivalent
Serial ATA x 4 / STC-24850	Molex 675820000 or equivalent
Serial ATA x 8 / STC-24900	Molex 675820000 or equivalent
Process EPS 8 Pins x 1 / STC-24850	Molex 39-01-2080 or equivalent
Process EPS 8 Pins x 2 / STC-24900	Molex 39-01-2080 or equivalent
PCIe 6 + 2 pin x 2 / STC-24850	
PCIe 6 + 2 pin x 4 (Max Optional 8 sets) / STC-24900	

#### Standard Output Cable Length:

550 mm / 21.65 Inches

#### PCB specific:

- ▶ 2 Layer / STC-24850
- ▶ 6 Layer / STC-24900
- ▶ 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:

850W:	3.5 kg / 7.716 lbs
900W:	4 kg / 8.816 lbs

#### Gross Weight:

850W:	4 kg / 8.818 lbs
900W:	4.4 kg / 9.698 lbs

#### Packing Detail:

850W:	4 PCs / GW 15.6 kg
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**900W:**

4 PCs / GW 17.6 kg

**Measurement of Carton:**

36 x 35 x 51 cm

0.066 m<sup>3</sup> / 2.33 Cuft