



±220V DC Input Industrial PC ATX 12V 2.03 1U Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
220	STC-220650I	650W continuous	±220V DC	±190V ~ ±240V DC	Protected (Max.500V DC)
	STC-220450I	450W continuous			

* H version (Black color chassis)

ENVIRONMENTAL CONDITIONS:

► Cooling:	Forced Air-cooling, 40x40x28mm Fan x 2 (With Two Ball Bearing)
► Fan Noise Level:	65dBA @ Full Load (STC-220450I)
► Fan brand:	DELTA, NMB, SUNON, SUNON IP68 (for H version) with the same specification
► Operating Temp.:	0°C~+50°C Full Load
► Operating Temp.: / H version	-20°C~+60°C Full Load
► Operating Humidity:	20%~85% RH Non condensing
► Operating Humidity: / H version	95% RH Non condensing
► Storage Temperature:	-20°C~+80°C
► Storage Humidity:	10%~90% RH. (Non condensing)
► Operating Altitude:	10M Below Sea level to Above Sea level 3000M

DC INPUT CHARACTERISTICS:

► Input connector type	40A/ 300V Single table type Terminal x 2
► Input Current	2.8A/3.9A(650W) 2A/2.7A(450W) @Full Load High Line & Low Line
► Inrush Current	Less than 6A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current				Ripple & Noise
	Load	Line	Cross	650W		450W		
				Min.	Max.	Min.	Max.	
+5V	±5%	±1%	±5%	0A	25A	0A	40A	50mV
+12V				0A	48A	0A	30A	120mV
+3.3V				0A	22A	0A	22A	50mV
-12V				±8%	0A	0.3A	0A	0.3A
+5VSB	±5%			0A	2.5A	0A	2.5A	50mV
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				620		420		Wattage
Maximum continuous total DC output power shall not exceed				650		450		

OVERALL PERFORMANCE:

- ▶ Efficiency 85% typical @220V DC Input 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 130%±10% of continuous rated power (shutdown & latch off)
- ▶ Over Voltage Protection (OVP) +3,3V@4.5V, +5V@6V, +12V@15.6V

RELIABILITY:

- ▶ MTBF: >70,000 hours @max. Load, 220V DC & 25°C ambient
- ▶ Safety Standards: Meet IEC60950-1, EN60950-1, meet EN62368
- ▶ 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: 2500V DC for 60 seconds
- ▶ Dielectric Withstand INPUT to FRAME GROUND: 2500V DC for 60 seconds
- ▶ Leakage Current <0.005μA @220V 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 7 Molex 8981-04P or equivalent
- ▶ FDD 4 Pins x 1 AMP 171822-4 or equivalent
- ▶ Serial ATA x 2 Molex 675820000 or equivalent
- ▶ CPU EPS 8 Pins x 1 Molex 39-01-2080 or equivalent
- ▶ PCIe 12V 6+2 pin x 4

PCB specific:

- ▶ Layers: 2 / **STC-220450I**
6 / **STC-220650I**
- ▶ Copper: 3 Oz
- ▶ Thickness: 1.6mm
- ▶ Material: FR4
- ▶ PCB material origin: Taiwan

Standard Output Cable Length From Chassis:

550 mm ±50mm / 21.6 inches

Power Chassis Dimension:

240(W) x 100(L) x 40.5(H) mm / 9.44(L) x 3.94(W) x 1.59(H) inches

Net Weight:

2 kg / 4.41 Lbs / **STC-220450I**
2.2 kg / 4.85 Lbs / **STC-220650I**

Gross Weight:

2.1~2.4 kg / 4.63 ~ 5.29 Lbs

Packing Detail:

8PCs N.W.: 16 kg / 35.27 Lbs G.W.: 18 kg / 39.68 Lbs / **STC-220450I**

8PCs N.W.: 17.6 kg / 38.8 Lbs G.W.: 20 kg / 44.09 Lbs / **STC-220650I**

Measurement of Carton:

0.049 m³ / 1.73 Cuft