



**±48V DC Input Industrial PC ATX 2.03
2U Switching Mode Power Supply**

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
48	STC-48750D	750 W continuous	±48V DC	±37V ~ ±71V DC	Protected (Max.100V DC)
	STC-48500D	500 W continuous			
	STC-48450D	450 W continuous			

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **60x60x25 mm Fan x 1 (With Two Ball Bearing)**
- ▶ Noise Level: 63dBA @ Full Load
- ▶ Operating Temperature: **0°C~+50°C (-20°C~+60°C optional) Full Load**
- ▶ 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 25A/300V UL Approved Gold plated brass 1.2t/ 3-Pin Terminal
- ▶ Input connection Make sure plug power source according to the label instruction
- ▶ Input Current 14A/26A(750W) 9A/18A(500W) 8A/14.5A(450W) @Full Load High Line & Low Line
- ▶ Inrush Current Less than 40A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current						Ripple & Noise
	Load	Line	Cross	750W		500W		450W		
				Min.	Max.	Min.	Max.	Min.	Max.	
+5V	±1%	±1%	±5%	0A	30A	0A	30A	0A	30A	50mV
+12V				0A	50A	0A	40A	0A	35A	120mV
+3.3V				0A	30A	0A	25A	0A	25A	50mV
-5V										
-12V	±8%			0A	1A	0A	1A	0A	1A	120mV
+5VSB	±5%			0A	3A	0A	3A	0A	3A	50mV
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				720		470		423		Wattage
Maximum continuous total DC output power shall not exceed				750		500		450		

OVERALL PERFORMANCE:

- ▶ Efficiency: 70% typical @48V 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: >80,000 hours @max. Load, 48V 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: 1000V DC for 60 seconds
- ▶ Dielectric Withstand: INPUT to FRAME GROUND: 1000V DC for 60 seconds
- ▶ Leakage Current: <0.005µA @48V 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
Serial ATA x 4	Molex 675820000 or equivalent
Process EPS 8 Pins x 1	Molex 39-01-2080 or equivalent
Process EPS 4 Pins x 1	Molex 39-01-2040 or equivalent
PCIe 8pin (6+2) x 4	

Standard Output Cable Length:

550 mm / 21.65 Inches

PCB specific:

- ▶ Layers: 2 (450W, 500W)
4 (750W)
- ▶ Copper: 3 Oz
- ▶ Thickness: 1.6mm
- ▶ Material: FR4
- ▶ PCB material origin: Taiwan

Power Chassis Dimension:

450W & 500W: 220(W) x 100(L) x70(H) mm / 8.66(L) x 3.94(W) x 2.76(H) inches

750W: 315(W) x 100(L) x70(H) mm / 12.4(L) x 3.94(W) x 2.76(H) inches

Net Weight:

450W & 500W: 2.4 kg (5.29 Lbs)

750W: 3.0 kg (6.61 Lbs)

Gross Weight:

450W & 500W: 2.7 kg (5.95 Lbs)

750W: 3.5 kg (7.71 Lbs)

Packing Detail:

8 PCs

Measurement of Carton:

0.049 m³ / 1.73 Cuft