



±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
12	STC-12500	500W	±12VDC	±9VDC~ ±18VDC	Not Protected
	STC-12450	450 W			Not Protected
	STC-12400	400 W			Not Protected

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **80x80x25 mm Fan x 1(With Two Ball Bearing)**
- ▶ Operating Temperature: **0°C~+60°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 type **100A/300V UL Approved Gold Plated Brass 1.2t/3 + 3-Pin Terminal**
- ▶ Input Current **83A/42A(500W) 75A/38A(450W) 67A/34A(400W)**
@ 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	500W		450W		400W		
				Min.	Max.	Min.	Max.	Min.	Max.	
+5V	±1%	±1%	±5%	0A	60A	0A	50A	0A	40A	50mV
+12V				0A	35A	0A	30A	0A	25A	120mV
+3.3V				0A	35A	0A	30A	0A	30A	50mV
-5V	±8%			0A	1A	0A	1A	0A	1A	120mV
-12V				0A	3A	0A	3A	0A	3A	50mV
+5VSB	±5%			0A	3A	0A	3A	0A	3A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				300		250		200		Wattage
Maximum continuous combined load on +3.3 V & +5V & 12VDC output shall not exceed				470		420		370		
Maximum continuous total DC output power shall not exceed				500		450		400		

OVERALL PERFORMANCE:

- ▶ Efficiency: **65% 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): **+5V, +12V & +3.3V**

RELIABILITY:

- ▶ MTBF: >90,000 hours @max. Load, 12V DC & 25°C ambient
- ▶ Safety Standards: Meet UL60950, TÜV EN60950
- ▶ Safety Approved:
- ▶ EMI Compatibility (EMC): FCC Part 15 Class A, CISPR22 (EN55022) Class A (CE mark)
- ▶ Dielectric Withstand: Input to Output: 500Vdc for 1 second
- ▶ Dielectric Withstand: Input to Frame ground 500Vdc for 1 second
- ▶ Leakage Current: <0.005uA @ 12Vdc

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 8	Molex 8981-04P or equivalent
FDD 4 Pins x 1	AMP 171822-4 or equivalent
Serial ATA x2	Molex 675820000 or equivalent
Process EPS 8 Pins x 1	Molex 39-01-2080 or equivalent

Standard Output Cable Length:

530 mm (170mm length chassis)
20.87 Inches

Power Chassis Dimension:

170(W) x 150(L) x 86(H) mm (STC-12400, 12450, 12500)
6.69(W) x 5.9(L) x 3.39(H) Inches

Net Weight:

3 kg
6.6.88 Lbs

Gross Weight:

3.3 kg
7.27 lbs

Packing Detail:

6 PCs

Measurement of Carton:

0.068M³
2.4 Cuft